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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Brothers Publishing Co.

VOL. XXXI.

CHICAGO, ILLINOIS, NOVEMBER 15, 1912.

No. 5.

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A plant equipped with the "Jones" Transmission Machinery,
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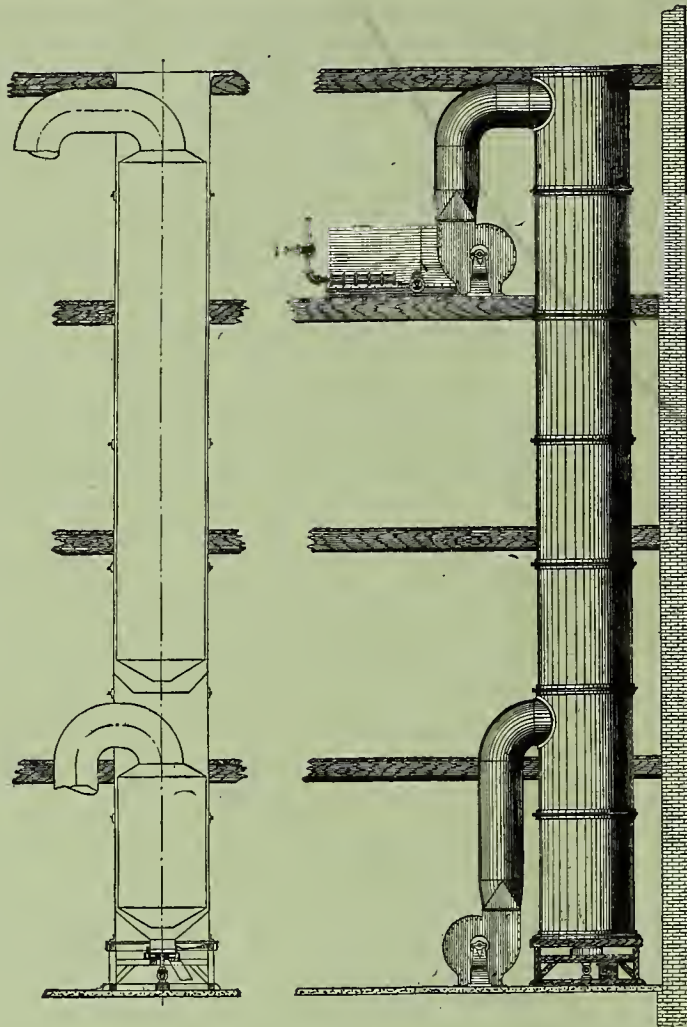
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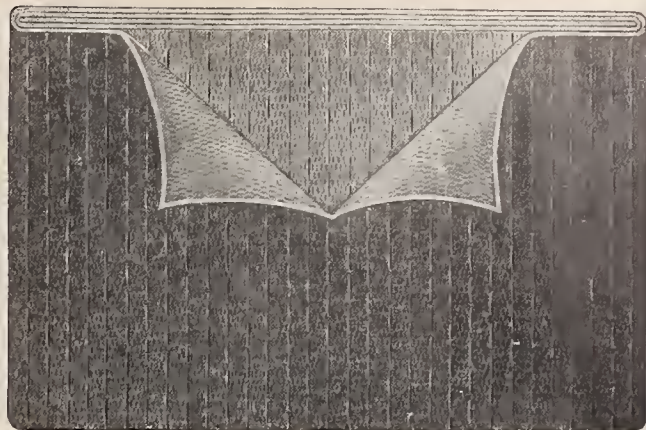
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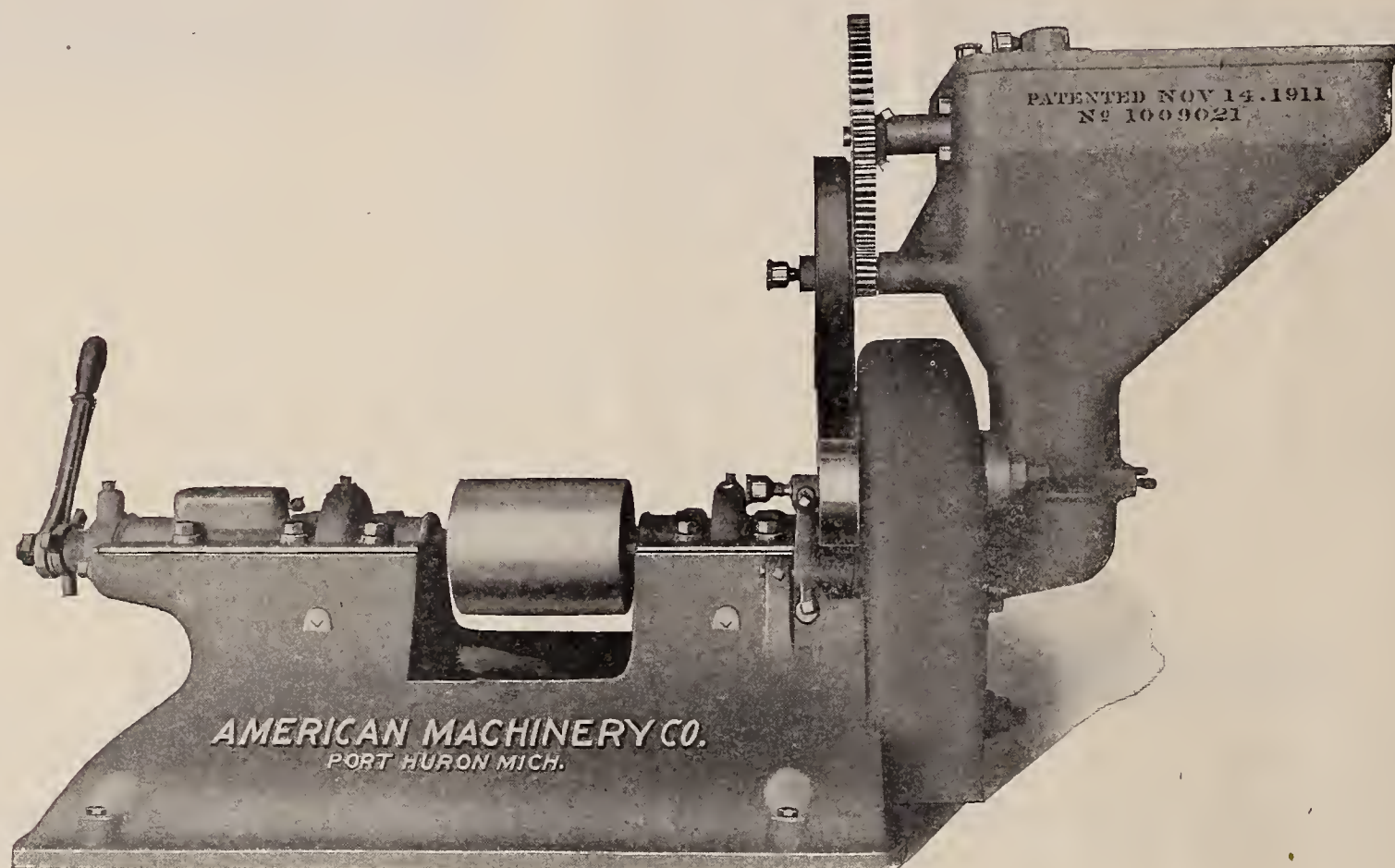
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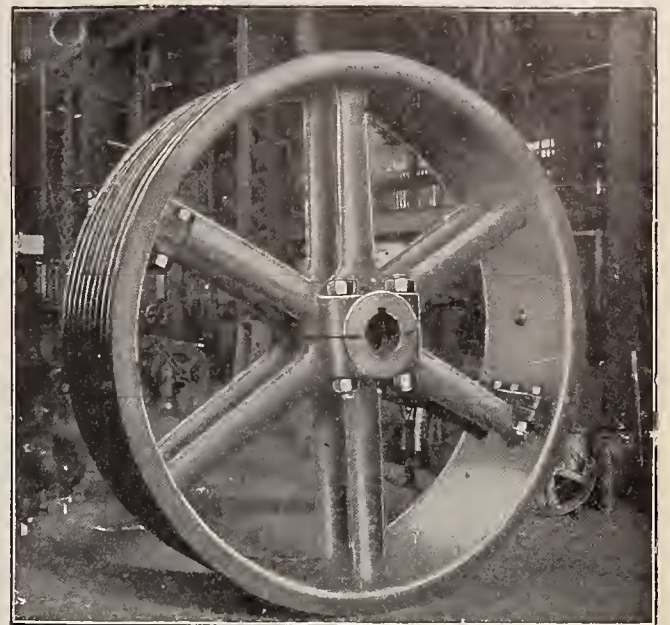
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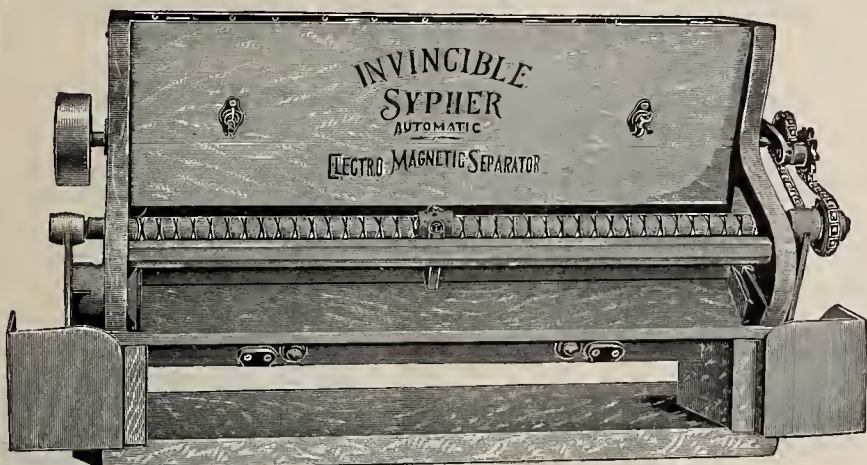
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We are prepared to furnish a small inexpensive dynamo for it where current is not available.

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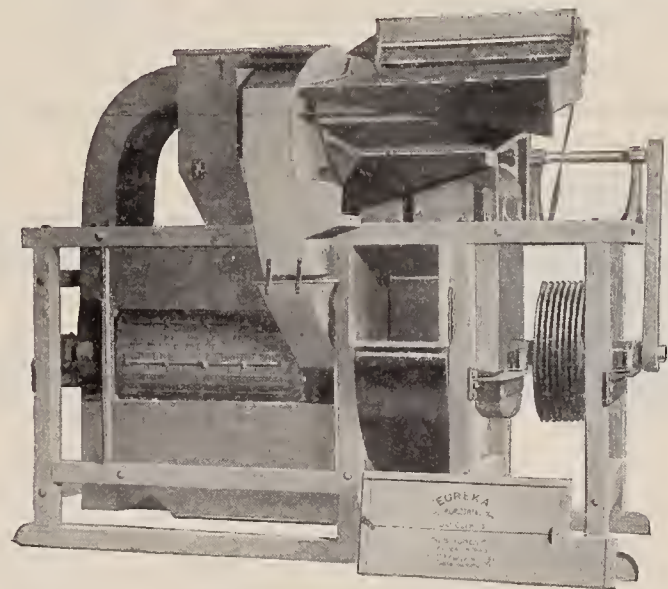
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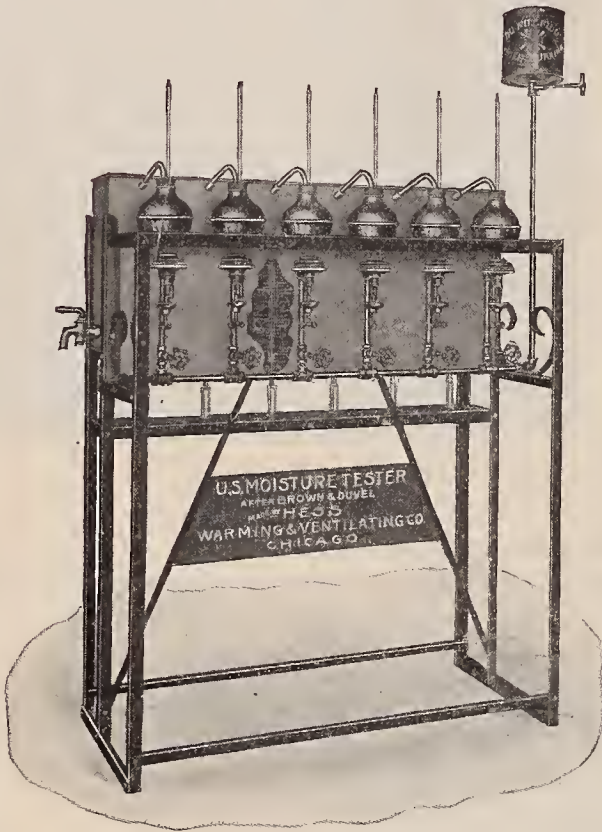
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There are more Hess Moisture Testers in use than all other makes combined
Why?

Because they are adapted for use with gasolene, which is the most available fuel for the country grain man, as well as with gas, electricity or alcohol, where these are preferred.

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Simply because you prefer paying a dollar or so more and getting **quality**.

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Most persons will gladly pay a little more for a good, clean-cut feed than pay ordinary prices for ordinary feed.

Therefore, put quality into your feed and —
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To produce high-grade feed you must own a high-grade mill.

Look where you may and as long as you will, you will never find a mill that is capable of grinding out feed possessing so high a degree of quality as the **Wolf Feed Mill** is capable of doing.

That's why so many millers and feed-mill owners who have installed this mill are enjoying such an increase in business.

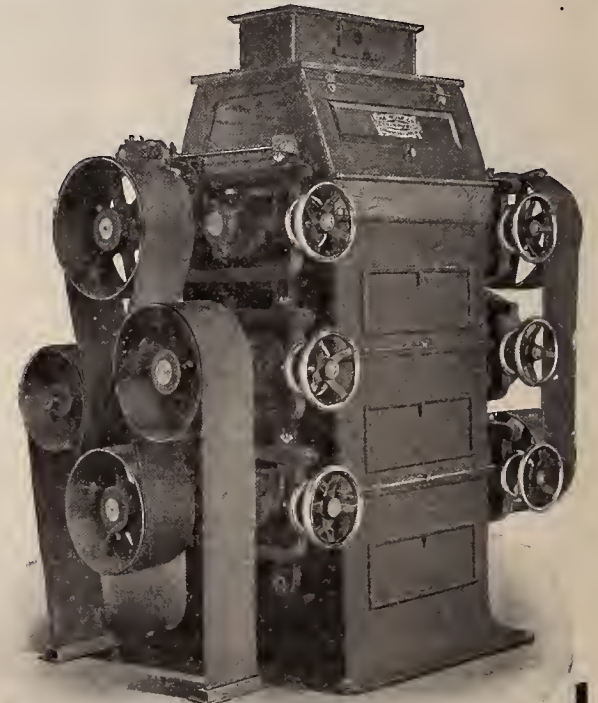
The **Wolf Feed Mill** is built to produce clean-cut feed — not to squeeze, mash and tear the stock, but to **cut**.

You can greatly increase the demand for **your** brand of feed if you care to.

The secret lies in the installation of a **Wolf Feed Grinding Mill**.

If you want to know how this mill is built and why it produces so high a grade of feed —

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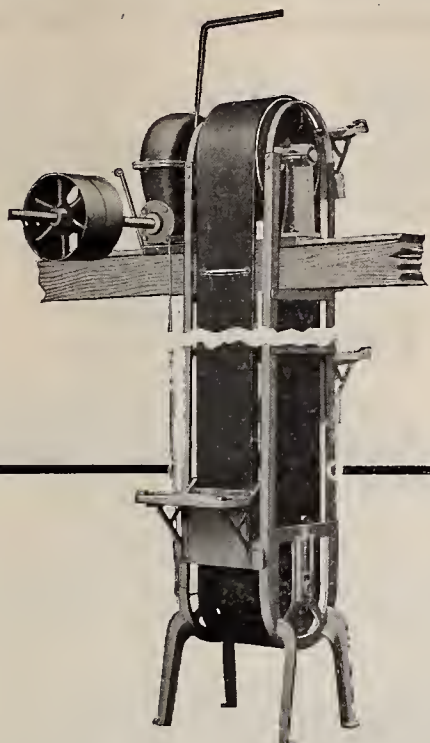
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THE WOLF COMPANY, Chambersburg, Pa.



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is now regarded as a necessity in every well appointed mill, grain elevator and warehouse. In the N. & M. Co. service elevator, the mechanical construction, convenience of operation and general usefulness have been improved to a marked extent, resulting in a far more substantial and durable construction, saving in power, absolute dependability and greater safety to the users. Besides being a handy and practical passenger elevator, this time and energy saving device is frequently used for handling packages, material in bags, etc. It is built in heights to suit your conditions.

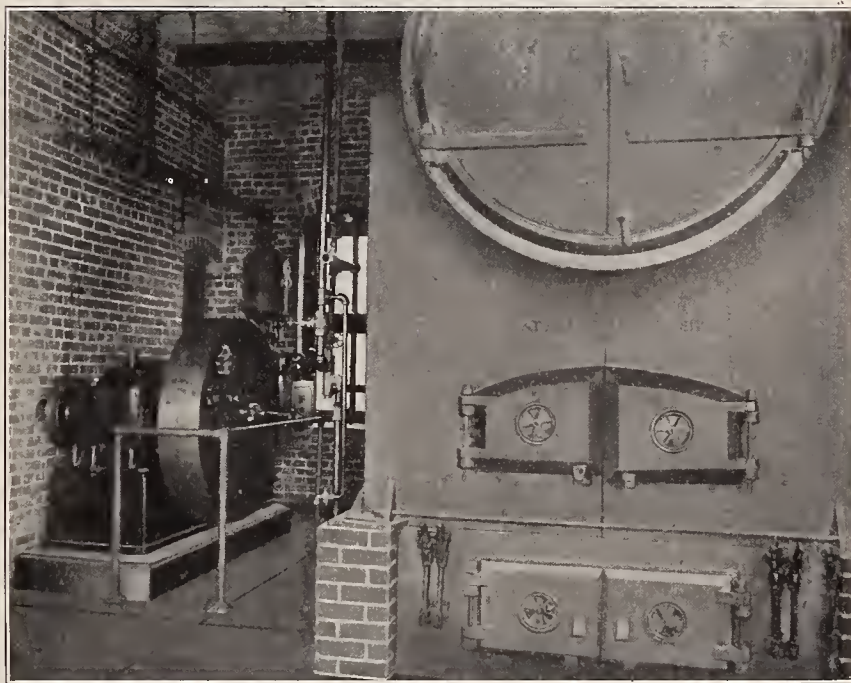
Our circular No. 1200 tells you about these service elevators. Write for it.

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America's Leading Mill Builders

Indianapolis, Indiana

THE ELLIS DRIER CO.



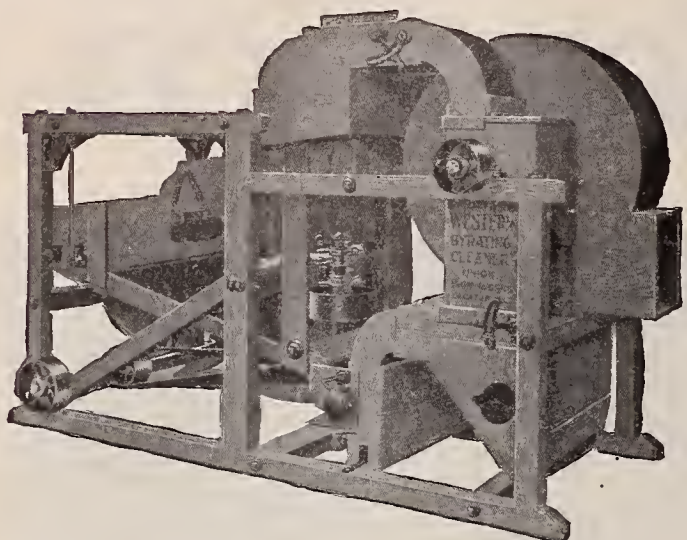
Boiler and Engine Room of the Holmquist Elevator Company Drying Plant, Omaha, Neb.

The engine and boiler room as shown above is illustrative of the power layout of a modern drying plant. The High Speed Enclosed Automatic Engine is direct connected to a "Sirrocco" Fan, which is completely separated from the engine room as shown. Exhaust steam from the engine is piped directly to the coils on the floor above. Water of condensation from the steam coils is returned by gravity to the boiler feed pump.

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machinery has played an important part in handling the world's Grain crop for nearly half a century.



The Western Gyrating Cleaner

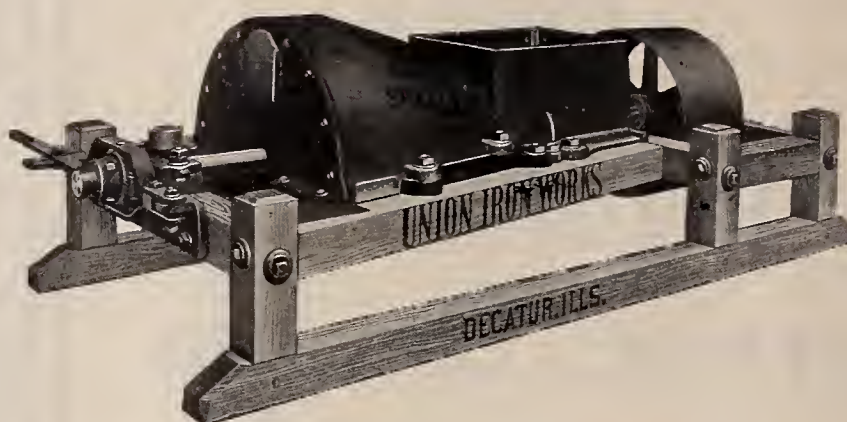
We manufacture everything needed for the grain elevator, from pit to cupola.

Write for Catalogue.

UNION IRON WORKS

Our SHELLERS and CLEANERS

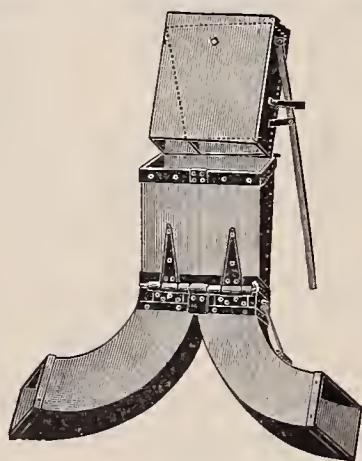
are the recognized standard wherever corn is grown.



The Western Regular Warehouse Sheller

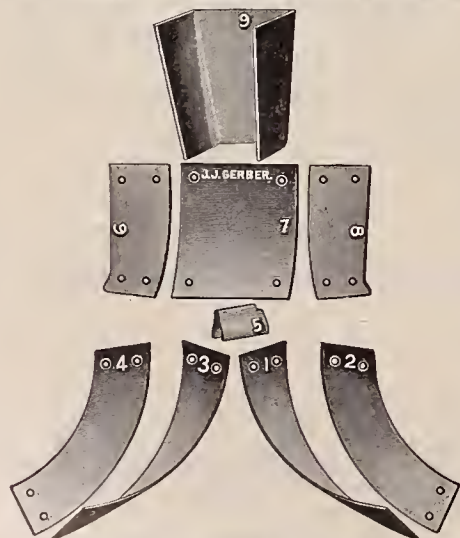
DECATUR, ILLINOIS

THE GERBER BIFURCATED GRAIN SPOUT



The only Spout made for trimming cars that will load both ends at the same time. It is made very heavy and has cast linings.

Cast Linings for Bifurcated Grain Spout

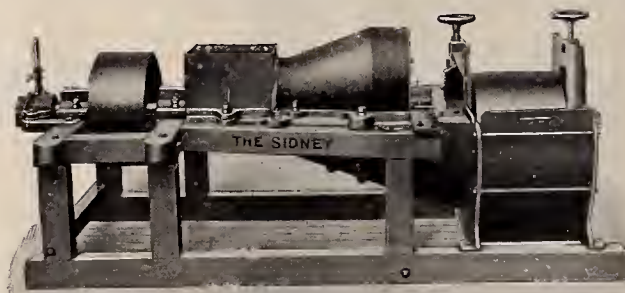


When ordering cast linings give number of parts required.

For particulars write

J. J. GERBER - MINNEAPOLIS, MINN

Sidney Corn Sheller and Elevator Boot Combined



THIS MACHINE was designed by us for convenience of Grain Elevator Operators who wish to avoid pits and do not favor a Fan Sheller. This is a combination of our regular Sheller and Standard Cast Iron Elevator Boot which does not require expensive hopping under the Sheller to the Boot. No fan to blow dust up your elevator legs, the boot being attached to sheller frame and forming a part of the Sheller. Absolutely no danger of sheller choking as you have an even feed from sheller to boot and your elevator cups are always filled evenly, that is, the grain is carried across the boot and fills the cup as much on one side as on the other. No danger of grain flying into your boot pulley when discharging from sheller to boot, as this pulley is provided with a plate. You will not be troubled with soured grain as there is no chance for leakage of grain in passing from sheller to boot and there is no possible chance for rats to work into the boot.

The Boot is provided with take-up screws to adjust or tighten the belt, the pulley and shaft in boot are entirely independent of the sheller, the boot pulley being driven from the head pulley. The end plates in boot are removable and provided with hand holes in case of choke-up in elevator. Boot made to fit any size cup, each sheller taking such a varied size elevator that in most all cases this machine can be attached to your present stand of elevators.

Sheller provided with our patented adjustment so that the cylinder can be adjusted to the different conditions of the corn while in operation.

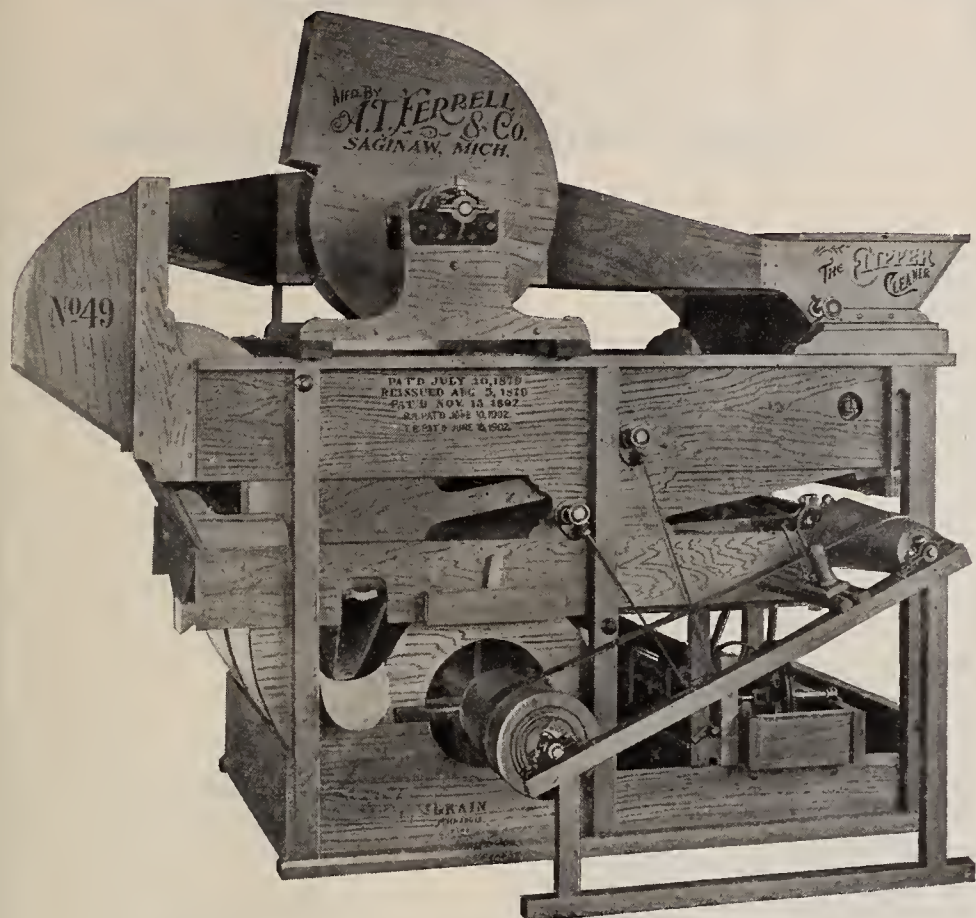
All shelling parts of shelling surface chilled, insuring durability; same applying to all "Sidney" Corn Shellers.

MANUFACTURED BY

The PHILIP SMITH MFG. CO., Sidney, Ohio

Write for complete Catalog No. 25, showing our entire line of Shellers and Cleaners. Grain Elevating and Conveying Machinery.

"Clipper" Grain and Seed Cleaners

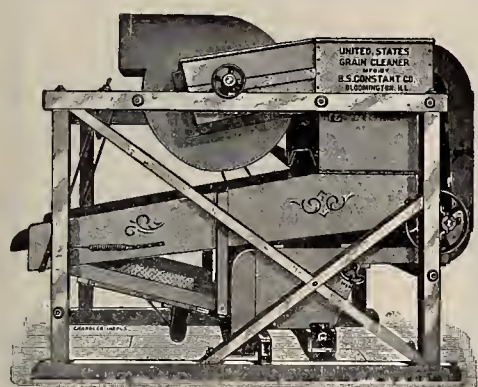


The No. 49 Clipper is a first-class grain receiving cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other grain cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would like to show you what we have. Our line of clover seed cleaners is strictly up-to-date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

A. T. FERRELL & CO.,

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THE U. S. Grain Cleaner

is the best in the Union and should be in the top of all elevators where Corn, Oats and Wheat are shipped.

Higher Grades—Higher Prices.
Long life machine.
Ring or Chain Oiling Bearings.
Balanced Eccentrix.
Five Separations and
All the Corn Saved.

The Constant Safety Ball Bearing Man-lift

the most satisfactory connecting link between Cleaner and Sheller.

Best made.
Easiest and safest.
Adjustable Brakes
which we guarantee.

State distance between floors and get our
Net Price

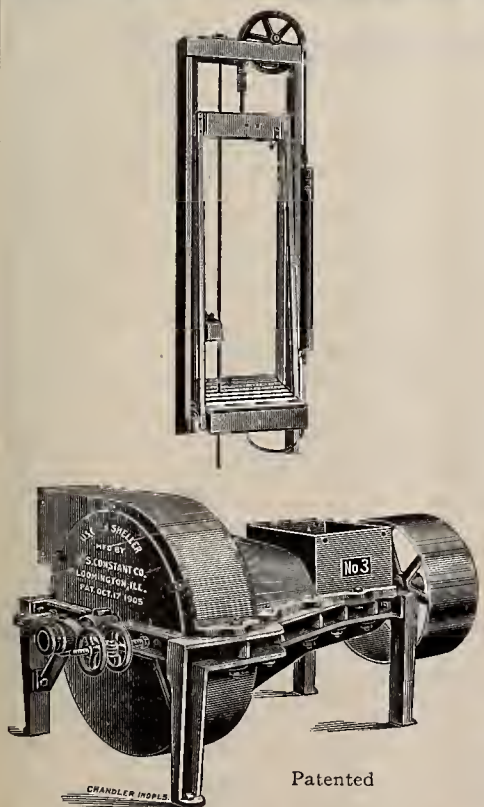
U. S. Corn Sheller

Fan Discharge,
over or under, right or left hand.

Iron or Wood Frame.
No Lower Hoppering.
Cheapest Installed.
Quickest and Cheapest Repaired
of any Sheller on the market.

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B. S. CONSTANT CO.
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E. P. BACON CO. Grain Commission Merchants

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We do not engage in buying grain on track or otherwise and are not interested in any manner in the purchase or manufacture of grain of any kind either in the country or at terminal markets; our business being confined to the selling of grain and seeds on consignment for the account of shippers.

Our managers in the three markets keep in constant touch with each other by wire during trading hours as to the condition of the cash grain market at each place, and by exchanging samples daily by mail representing actual sales.

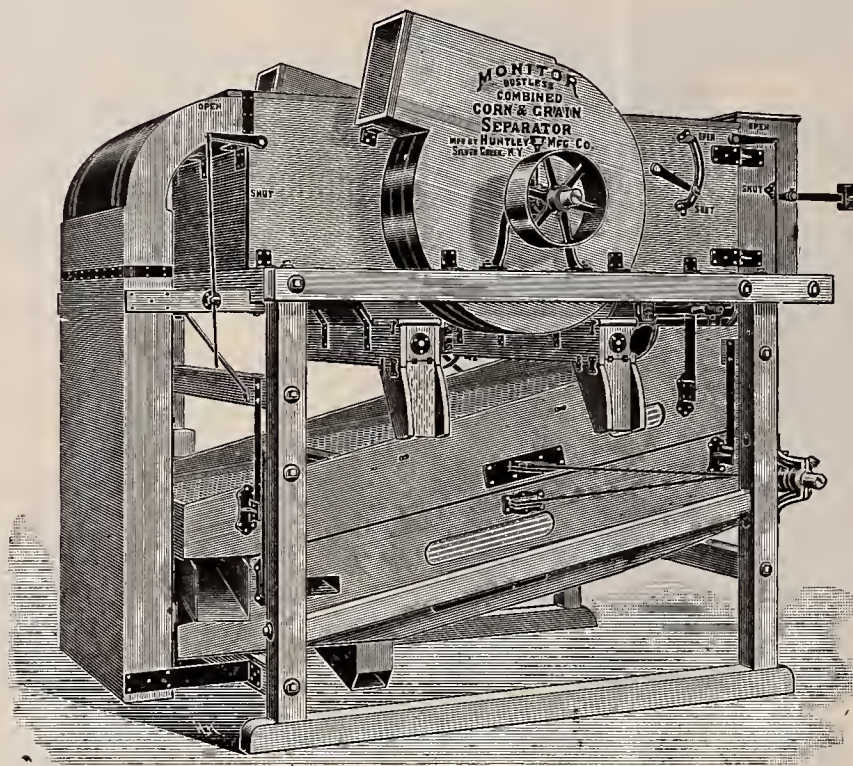
MILWAUKEE OFFICE
17 Chamber of Commerce

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"MONITOR"

———— The Original ————
The first
"COMBINED"
CORN AND GRAIN CLEANER



An exclusive design — its best features protected by patents.

Very light running—very superior screen and air separations.

Why have two cleaners if this one will answer as well?

In hundreds of elevators it answers for two cleaners

In elevators handling corn with cob, wheat, oats, barley, rye, etc., quick shifts in cleaning are often necessary. Many elevators maintain two separate cleaners for their work—a mistake in many cases as they could easily handle their cleaning with one "Monitor" *Combined*. This machine carries two independent screen outfits, grain is diverted to either without stopping machine—always ready for two kinds of work without a change of screens. Occupying the floor space of only one regular machine it handles the work of two cleaners. For quick service nothing so efficient has been introduced up to the present time.

It will greatly simplify—and reduce cost of your cleaning work

Simplified cleaning operations a dead certainty—the cost for operator's care and attention lessened in direct proportion. A compact, sturdy type of heavy-duty cleaner that actually performs closer, more economical work—so guaranteed. For light power and ease of regulation it stands quite alone in the *combined* cleaner field. Their appointments throughout are easily the best to be had—equipment features of these "Monitors" are improvements decidedly to your advantage. Get acquainted with them, please.

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Akron, Ohio—A. S. Garman
Owego, N. Y.—J. H. Foote

The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

VOL. XXXI.

CHICAGO, ILLINOIS, NOVEMBER 15, 1912.

No. 5.

A MILL ELEVATOR.

In all parts of the country there are seen the effects of high prices for old forms of building materials and a realization of the truth that is being rudely brought home to investors in real estate improvements, that the true economy of the day lies in building now for the future as well as for today and to check the waste of the Nation's wealth that every year is counted by the records of losses by fire. In the picture before him the reader is presented with one of the best types of modern grain elevator construction for future as well as for current service. It is a mill storage plant, erected by the Barnett & Record Company of Minneapolis for The J. C. Lysle Milling Co. of Leavenworth, Kans., adjoining the mill in that city.

The tanks are 16 feet in diameter and 85 feet high. As will be noticed in the picture, there is a conveyor gallery on top of the tanks and a top-house (130 feet above the level of the track) for the cleaning machinery. The equipment consists of two 24-inch belt conveyors in the basement, two elevator legs with a capacity of 4,000 bushels per hour, and two 16-inch screw conveyors for distributing the wheat handled on top of the tanks, which is discharged into telescope spouts to reach the various bins. There is a No. 11 Monitor Receiving Separator with a capacity of 4,000 bushels per hour. This equipment will permit the unloading of wheat at the rate of 4,000 bushels per hour and the handling of wheat with the other leg at the same rate. There are power shovels for unloading and a car puller in the equipment. The elevator is driven by electricity, the equipment consisting of a 50- and a 30-horsepower Westinghouse Motors driven by an Allis-Chalmers Generator located in the engine room of the mill power plant. There is also a man hoist for the employes to go to the top of the plant.

The machinery and equipment is steel throughout, so that the elevator is thoroughly fire-proof. The house is lighted by electricity, the wires being carried in steel conduits throughout the plant.

It will be noticed also from the ground plan sketch that one of the tanks is subdivided into four small bins. This, together with the interspaces, gives fourteen small bins and seventeen large bins, together with two little corner bins. The total capacity of the plant is thus 250,000 bushels.

Prof. Thomas Shaw, in a recent pamphlet published for the benefit of Northwestern farmers, as agricultural expert for the N. P. R. R., says, in substance, that, "If the farmers of the Northwest had planned to stack their grain as soon as it could be done, much low quality wheat and barley, now coming to market, would not have been seen. Once in the stack grain is safe from damage by bad

weather, and if labor were scarce the farmers might have stacked it themselves by helping one another."

ARGENTINE CORN.

A cargo of 4,500 tons of Argentine corn, to be made into glucose, landed at Boston on October 17, the largest ever taken from Buenos Ayres to Boston, reminds one that the Argentine Minister of Public Works recently reported to the President of the Republic a project for improving the present system of grain transport and export, which involves the construction at State expense of grain elevators at ports where these do not exist and also



ELEVATOR OF J. C. LYSLE MILLING CO., LEAVENWORTH, KANS.
Designed and erected by Barnett & Record Co., Minneapolis.

at railway stations in the greatest grain-producing centers, these latter in proportion to the production of the district. The Minister shows that \$20,000,000 (reckoning on an average of 12,000,000 tons of grain to be handled) would be saved, calculated as follows: Cost of sacks, \$10,000,000; freights on dirt in grain, \$500,000; saving in labor in loading and weighing, \$2,200,000; other losses incurred in shipping in sacks, \$2,300,000; while \$5,000,000 could be realized additional through the better quality of the grain exported.

The Minister proposes to issue \$10,000,000 in bonds, to be repaid by an export tax of 50 cents Argentine (21.23 cents American) per ton on wheat, maize, etc., and one of \$1 (\$0.4246 American) per ton on linseed, which he calculates would bring in about \$2,125,000 per annum.

Agricultural Department authorities estimate that the cotton boll weevil, the greatest pest of the South, has caused a loss of \$125,000,000 since it first invaded this country by crossing the Rio Grande twenty years ago; and the problem of its control, the Department says, will be more difficult as the pest continues its invasion of the cotton belt, for it cannot be considered as yet completely solved.

THE COMMERCE COMMISSION.

The complaint was made by President Johnson at Norfolk that the Commerce Commission was not duly considerate—that it almost invariably suspended a rate that provided for an advance; but Mr. Johnson left his hearers in ignorance of the fact that, whether desirable or undesirable in the long run, the law as now on the statute books provides that an "advance must be suspended upon the complaint of a shipper and investigated." It does not follow, then, that the Commission is always responsible; indeed, for the most part these suspensions are not made upon the voluntary motion of the Commission, but are suspended because some shipper complains of a proposed advance.

Nor does it follow that because a rate is suspended it is canceled. In many recent instance announced advances in grain rates are suspended only during a given period, or until a definite date, during which period the probable effect and the equity of the advance must be investigated and passed upon. When a rate is suspended, however, for an indefinite period it means in practice a tying up of that advance for about a year after it is proposed and also, of course, inasmuch as the law places the burden of proof upon the railroads, the odds are against the advanced rates. But for this condition of affairs the Commission is not entirely to blame; any criticism must go back to Congress, which, under pressure of public opinion, so well satisfied is the public with the Commission's work, has seemed willing, in very recent years, to give the Commission all the powers it has

asked for "and then some."

Since the law became operative in its present form in 1910, the Commission has made 167 suspensions, of which 54 are still pending, 30 having been dismissed and 83 otherwise disposed of. In some very important cases advances have been allowed and some potential precedents have been established, few of these, however, directly affecting grain, grain products or hay rates. In 20 of the 83 cases adjudicated, rate advances were denied, in whole or in part, as asked for, on various commodities, such as the advancing of live stock rates from the Southwest in order to readjust to suit a new packing house recently built; proposed advances in the rates on rice and rice products from Gulf ports to North Atlantic ports; advances on barley, etc., from Phoenix to other points in Arizona; advances in class rates from St. Paul, Minneapolis and Duluth to Buffalo, Pittsburgh and other points; and so on.

During the summer and fall many suspensions of grain rates were made, generally until a date subsequent to January 1, 1913, so that the "I. & S." docket for the late fall and winter now contains, as a correspondent of the *Journal of Commerce* says, "a number of cases which the Commission will find it impossible to consider because it is overcrowded

with work. The winter docket contains in addition to suspensions of rate advances, the suspension of various traffic, milling in transit, storage, re-shipment, and other tariff privileges. While none of these cases rises in individual prominence to the level of other cases pending on other dockets of

the season did not have a good start when the dry weather set in. Such kaffir remained green and in good condition waiting for rain. The late summer rains came and it immediately grew and headed."

At the convention at Fort Worth, Texas, in October, of the U. S. Demonstration Agents, reports from all sections of the semi-arid and arid regions of west Texas summed up were to the effect that milo maize, kaffir corn and sorghum were the logical feed crops for that part of the State, and that cotton, under normal conditions, would prosper. The agents, however, condemned the attempt to raise corn, which after many years' effort has been declared a failure, either on account of dry weather or dry, hot winds.

RICHMOND AS A GRAIN DISTRIBUTOR.

Richmond, Va., now a growing city of probably 140,000 people, with a constantly expanding circle of commercial influence, has become also one of the chief business centers of the South considered as a grain market as in other branches of trade. As a grain distributor it is distinguished by the fact that it has the only grain exchange in the Southeast south of Baltimore, with the exception of New Orleans; and the enormous business done through Richmond in supplying the needs of the South is supplemented by engagements made there for shipments abroad. The city being an important Virginia gateway between the West and the South on account of its favorable rates, the grain trade will continue to grow, without doubt.

One of the most important of Richmond's facilities for handling this large and growing trade is the Chesapeake & Ohio Elevator, now operated by the Adams Grain and Provision Company, of which W. T. Selden is manager. It has a capacity of 100,000 bushels, and is equipped with a full line of elevator machinery, including two hopper scales, each with the capacity of a thousand bushels; and in addition the elevator has two overhanging Sonander Automatic Sacking Scales. The elevator is unique in this part of the South in that it is operated by electricity, requiring seventy-five horsepower to operate it throughout. The daily handling of the elevator is about thirty cars. The side track will accommodate sixteen cars at one time.

Adjoining the elevator is an absolutely fire-proof concrete three-story warehouse, occupied by the

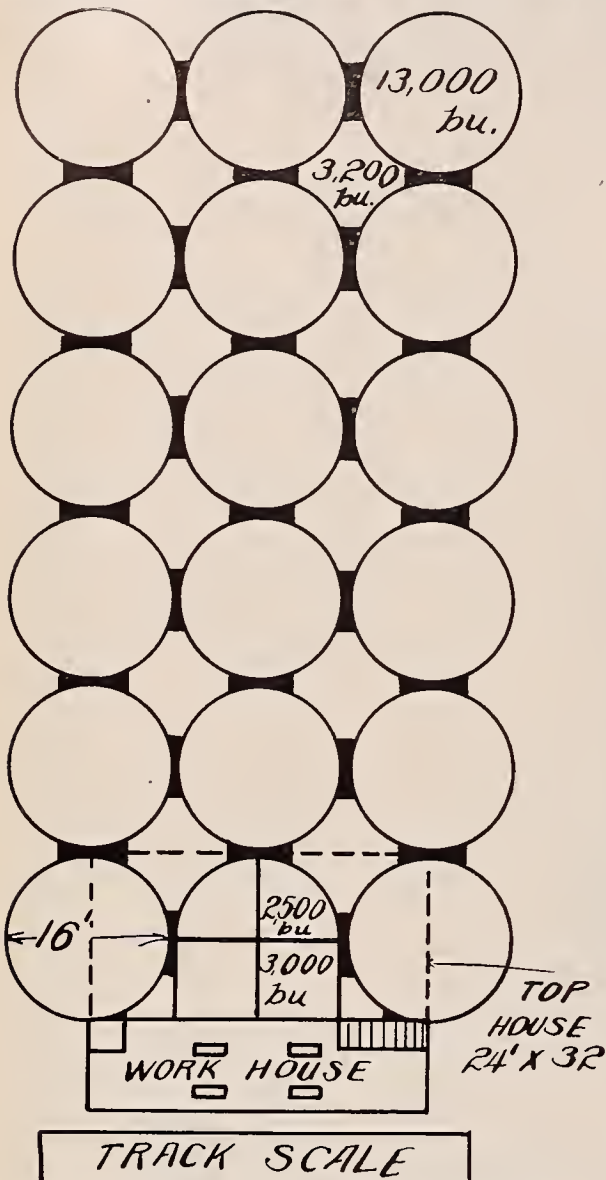
COTTON "CORNER" CASE.

Arguments in the U. S. Supreme Court in the action of the Government against James A. Patten and others charged with conspiracy to "corner cotton" on the New York Cotton Exchange in 1910, in violation of the Sherman anti-trust law, were made on October 23 and 24, the hearing being the second of this cause, the Court desiring more information and suggestions than were submitted to the Federal Court in New York, that quashed several counts of the indictment.

Chief Justice White at the start wanted a definition of the term "corner" as used in the indictment; and Solicitor-General Bullitt replied that it is "a combination among dealers in a commodity or among outside capitalists for the purpose of buying up the greater portion of the commodity and holding it back from sale until the demand so far outran the limited supply as to advance the price abnormally."

In further response to Chief Justice White's request, "Now, I want you to show how the indictment fits that definition," Mr. Bullitt announced that the Government would abandon the third count of the indictment, because the lower court had found there was no charge in it that the defendants were to hold back the cotton from sale, and consequently no corner could be charged; and he added, "I frankly admit that the other count, the seventh, has the defect that there is in it no express statement that the combination was created to withhold from the market the cotton bought." In dealing with this defect the Government advanced two arguments: one, that the lower court construed the count to charge the running of a corner, and the Supreme Court could do nothing now but accept that interpretation, notwithstanding it might have the duty to examine the interpretation if there was a conviction and an appeal; and, second, that the Government had used the word "corner" in the count and everybody in the world knew that a corner included a withholding from sale. When Justice Vandevanter further suggested that the person who drafted the indictment did not have that in mind, perhaps, for immediately after the word "corner" he had defined the term, without including a charge of withholding from sale, Mr. Bullitt admitted that if neither one of these arguments was acceptable the Government had no case.

The case against Mr. Patten *et al.* seems rather a thin one, but it is important at this moment in view



BIN PLAN OF LYSLE ELEVATOR—Page 253.

the Commission, their sum total is of enormous importance. All of this only goes to show that some remedy will have to be devised whereby the Commission can be relieved of a part of its burden, or it will be in danger of losing such present prestige as it has."

KAFFIR CORN FESTIVAL.

The usual fall Kaffir Corn Carnival was held at El Dorado, Kans., on October 16-18, and the affair taxed to the limit the local reporters' vocabulary of adjectives. The acreage of Butler County to this crop in 1912 was 120,000; and the carnival did full credit to the harvest, many valuable prizes being distributed to growers. Another good kaffir county is Riley, that has averaged for several years 2,833 pounds to the acre, not counting six tons of fodder per acre. Sumner is also a producer, sending this year the first car of kaffir marketed at Wichita, on October 21, and graded No. 2. The Kansas crop was not all of equal value, however, because, as the *Kansas Farmer* reports, "hundreds of acres of immature kaffir were caught by the recent frosts, and the yield and quality of grain much reduced thereby. The greater part of the damaged frost-bitten kaffir was that late planted. This is some evidence that in Kansas we do not plant kaffir sufficiently early. Not attaching to kaffir the importance of dependence for a grain crop, the custom is to delay kaffir planting until all other spring planting is done. This has the effect of the kaffir maturing late in the fall and taking long chances on its being frosted before maturity."

The *Farmer* therefore advises early maturing varieties, like the "Red Kaffir," which does not grow so large and is not such a heavy yielder as white, but it matures earlier.

"Much of the frost-bitten kaffir," the *Farmer* adds, "demonstrates the peculiar adaptability of the plant to dry weather conditions. Kaffir planted late in

same firm, which does a very large business throughout the South, having branches at Asheville, Fayetteville and Charlotte, N. C.

The Adams Grain and Provision Company operates also the Chesapeake and Ohio Elevator at Newport News, Va., for export, with a capacity of a million bushels.

of the fact that a certain element in the Congress has been trying to make trading in cotton futures illegal. The situation emphasized by the case at bar takes the form of an interesting dilemma. The Southern statesmen pressing the anti-futures bill in the house justify their action by declaring that trading in cotton futures tends to keep down the



CHESAPEAKE & OHIO ELEVATOR AT RICHMOND, VA.

actual price of cotton, but the case before the Supreme Court was brought against a "corner" which had for its purpose increasing the price of cotton. The confusion is only too evident, and, as has been pointed out by the *Journal of Commerce*, "the only real similarity between the conditions recognized in the case before the Supreme Court and those attacked in the bill lately passed by the House is that both the bill and the case are asserted to have been part of an attempt to break down "illegal" interferences with interstate trade.

Mr. Bullitt, in discussing the nature of the commerce that was "restrained" by the "Patten corner" of September 1, 1910, says in his brief filed with the Court:

For many years past cotton has been and is an article of prime necessity to the people of the United States; many millions of acres of land in fifteen Southern States have been devoted to its cultivation, one crop a year; about 60 per cent. of the annual crop has been exported to foreign countries; about 20 per cent. has been manufactured into fabrics in the various cotton-growing States, and about 20 per cent. has been shipped to ten Northern States and there manufactured into fabrics; the fabrics so manufactured have been used by the people of the United States and foreign countries; the demand for cotton from foreign countries and from the Northern and Southern States has been steady and continuous throughout all portions of the year, and spinners and manufacturers bought little or no cotton beyond their immediate needs, thus insuring a steady flow of cotton in commerce during the year; cotton has been bought and sold for future delivery upon the Cotton Exchange in New York during the current crop years to such an extent "that cotton bought and sold elsewhere in the United States than on that Exchange has customarily been bought and sold at prices corresponding to the prices prevailing upon said Exchange"; on September 1, 1909, there were about 265,000 bales of cotton left over from prior crops, and the cotton crop for the year ending September 1, 1910, was about 10,500,000 bales; by speculators purchasing cotton for future delivery on said Exchange in quantities vastly in excess of the available supply, the sellers of such cotton have not been able to obtain the full amount of cotton for delivery; the efforts of such sellers to obtain cotton for delivery have created an abnormal demand for cotton, and excessive prices therefor have prevailed on said Exchange and in all cotton markets until such sellers have effected settlements with the purchasers at such excessive prices, and therefore the bona fide purchasers of cotton for consumption in spinning and manufacturing have been compelled to pay the same excessive prices in order to obtain cotton for their needs, and the defendants and their co-conspirators knew all these facts.

Does this sort of transaction of which the Government complains constitute a violation of the anti-trust act—the pooling by a number of capitalists of their funds to purchase for future delivery on one of the great commercial exchanges of the world vast quantities of a staple commodity like cotton in excess of what can possibly be procured for delivery? The creation of a "corner," the Government argues, caused the price of cotton to rise, with the necessary and unavoidable effect that legitimate users and consumers of such commodity in interstate trade and commerce had to face the alternative of ceasing purchases and shipments of cotton, closing down their mills and factories, with its consequent disruption of trade and commerce, or of paying fictitious prices wholly disproportionate to any real value of the cotton. This is a new question under the Sherman law, but arguing by analogy from the decisions in the Standard Oil and Tobacco Trust cases—

the Government insists that a cotton "corner" operates to the prejudice of the public interests by obstructing the due course of trade and by injuriously restraining trade because of the inherent nature of a corner.

And, again: The true rule concerning combinations for the operation of a corner may be stated as follows: All contracts and undertakings in support of a combination, the object of which is to secure control of the immediate supply of any commodity or product essential to the life or comfort of the community as to enable the combination to arbitrarily control the prices of such product or commodity, are illegal and void at common law as in restraint of trade and against public policy.

On the close relation between the cotton corner case and other trust cases already decided by the courts, the argument says:

Bearing in mind the construction given to the first section of the anti-trust act in the Standard Oil and American Tobacco Company cases, that it was not confined to conditions falling within technically correct legal definitions of "restraint of trade" or "monopoly," but was intended to reach whatsoever kind of concerted action between persons or conspirators the reasonably direct and necessary consequences of which were to bring about those evils which history shows were associated in the minds of the people with monopolies, to-wit: (a) enhancement or control of prices, (b) unreasonably limited

or suppressing competition, (c) interfering with the liberty of persons to carry on their trade under fairly normal competitive conditions, (d) limiting the market in matters of purchase or sale, and (e) interposing an obstruction or hindrance to the free flow of commerce between the States—all with reference to transporting between the States of articles which are the subject of such commerce—is not a conspiracy to run a corner in cotton calculated to produce many of the evils which the statute seeks to prevent? If this was not a restraint of trade those words of common use have lost the meaning they have borne for centuries, and if the trade restrained was not interstate there is no trade which may fairly bear that name.

JAMES M. MAGUIRE.

James M. Maguire, the subject of our sketch, who has associated himself with Frank J. Delany as cash grain salesman on the Chicago Board of Trade, is a man of very wide experience in the country grain trade.

Starting in in the country elevator business at Campus, Ill., he later went with Carrington, Hannah & Co., and remained with them for seven years. Later on, with his brother, he constituted the firm of Maguire Brothers at Campus, Ill. He



JAMES M. MAGUIRE.

continued that business until they sold out to the Farmers' Elevator Company of Campus. Mr. Maguire then represented Sam Finney in Illinois and Indiana for a number of years and later opened up an elevator brokerage business.

His varied experience, therefore, and his extensive acquaintanceship, coupled with his natural ability as a successful country grain man, makes him a desirable acquisition to any firm. His association with Mr. Delany, who is one of the younger but one of the most aggressive and most capable of the Chicago commission merchants, should work to the benefit of both and should operate to the financial advantage of their many friends.

Big businesses grow from small ones and with two capable men in charge of the business of Frank J. Delany, there is no reason why, a few years from now, this firm should not be one of the large and important ones in the receiving business of the Chicago Board of Trade.

The office as correspondent of the British Board of Trade Journal at Durban, South Africa, reports that although the maize crops grown by natives suffered severely from drought and the local demand has therefore been greater, it appears from the returns available that the shipments from Durban this year will exceed those of last year. Up to the end of August some 363,000 bags, equal to 32,410 tons, were shipped, as against 477,000 bags, or 42,590 tons, shipped during the whole of last year. Up to the same date, more maize has been exported through Port Natal than through all the other ports of the Union of South Africa combined.

A NATIONAL MARKET.

President B. F. Yoakum of the 'Frisco System has not only that railway property but also the woes of the farmers of the Southwest on his mind. The two are likely to keep him mentally employed, especially the farmers. He confessed in an address at Dallas, Texas, on October 19, to the convention of Southwestern Growers, that ten years ago he "came to the conclusion from the way our political affairs were shaping that the safest way for a railroad to proceed was to go to work with the farmer and co-operate with him to better his position and in every possible way to make him stronger and increase his efficiency." This might be construed as a discovery that railroading in the Southwest were the more desirable occupation of a real railroad president than "operating" the same road in New York exclusively; but that is not here intimated, happy as the discovery might be deemed.

But ten years' study of railroading in contact with the farmers, producers of railroad tonnage, has had its happy effect on Mr. Yoakum. He now recognizes the value to the farmer and to the railroads of good dirt roads from the station to the farms; and the 'Frisco has for several years past taken an active and intelligent part in the work of promoting the "new agriculture" in that part of our country, with distinguished success. Now Mr. Yoakum would go a step farther and endeavor to establish "a system of co-operation that will eliminate unnecessary expense against foodstuffs between the farmers and the consumers of the products; to introduce a system of co-operative farm finance that will make it possible for the American farmer to borrow both on mortgages and on current loans at a much better rate than he has to pay to-day; and to work out a system of market bureaus which will put the farmer as closely in touch with his market as the steel maker, the hat maker, the automobile builder, or the oil producer is with his market."

Such an economic ideal he would call a "National Producers' Association"; and he proceeds to explain that—

The broad and comprehensive principles of the work of a National Producers' Association should not be misunderstood. It should be clearly set forth and thoroughly understood by the public that it is not the formation of a trust to maintain high retail prices of food or to put these prices higher, but that its basic principle is to formulate and put into operation a system of selling and distributing the products of the field in such a way that they will go as directly to the consumer as good organization will permit, and with the least expense. This new system of handling farm products will not interfere with the legitimate commission business of the country. It will aid it. Commission merchants will always be necessary, but one commission ought to be sufficient, and that one fixed so that the cost of selling will be known by the producer.

Which is not, one must confess, quite as clear as it may seem to Mr. Yoakum, as a practical proposition differentiated from the system of marketing farm products now obtaining; nor does the scheme appear any more promising in view of Mr. Yoakum's apparent proposition to make "the Government" a general advisor of the farmer as to the best time to sell. Mr. Yoakum says:

It is just as important for the agricultural producer to know what the markets are as it is for the lumberman, the coal and ore producer or the manufacturer to know what his goods are worth in the market and what competition he must meet in his selling. It would be possible to organize the entire truck growing territory of the Southwest into zones of distribution and to control the output in such a way as to prevent congestion and wasteful prices by overcrowding the markets. The government of the United States should assist the formation of such a co-operative marketing system by establishing ample sources of direct information on markets and distributing that information to the producing communities. The time has come when the government must pay more attention to legislation for the benefit of the farmer than it has paid in the past.

The Manitoba Grain Commission have appointed tentatively a number of inspectors of country elevators. They will be employed constantly inquiring into the grievances of shippers at the various points, the object being, say the Commission, "to secure a square deal for the farmers at the hands of the elevator companies and the railway companies at the initial points along the lines. If the scheme works this kind of inspection will be made general."

[For the "American Elevator and Grain Trade."]

OHIO RIVER WHARF BOATS.HOW THE HAY BALES ARE LOADED ON THE STEAMERS
AND FIND THEIR WAY UP AND DOWN THE RIVER.

BY FELIX J. KOCH.

You who have little idea of what the hay trade comes to in some of the States of the Middle West, which are not always reckoned among the great grain or hay producing sections of the country, go, say, by Louisville and Cincinnati packets, down the Ohio and inspect the wharf-boats you will see on the way. To most travelers today these old-time wharf-boats are *terra incognita*. At the larger



OHIO RIVER WHARF BOAT USED AS TEMPORARY STORAGE FOR HAY, ETC.

cities, where the grain and hay dealers board or quit the vessels, there are pretentious docks and quays. But out here in the country, at the little river county seats and market towns, the people still cling to the same old type of landing that was used in the days of which Eggleston wrote in his "Hoosier Schoolmaster." If Noah's Ark had a rounded roof, then Noah's Ark was a pattern for the first and all subsequent wharf-boats, for all the roofs are round, like that in the picture.

Farmers drive into Vevey, Ind., for one, for miles about, with their hay. Most of them have their own hay presses on the farm; those who have not patronize those who have or some one in town. Then with the hay neatly baled, it is run down the steep incline to the wharf-boat, where the old Kentucky darkies, who have done nothing else but this work since "fore the Wa'," catch hold of the bales of hay, just as their Jamaican brethren do the bunches of bananas at the fruit companies' landings in Panama. Two men take a bale from the wagon and toss it on to two more, and these two in turn manage to swing it to two others already standing on a lower tier of hay bales. These latter catch and stack it, then climb on it, to make room for other bales still to come. Higher and higher grows this pile of bales, until it is lost under the recesses of the roof. Somehow it makes one think of the story of building the Pyramids—how each tier, as finished, was made unscalable, the food and supplies being sent to the workmen above by pulley, and then, when the cap-stone was put on and the ladders withdrawn, the Pyramids could not be topped. So with the hay, it is crowned at the top and you couldn't find room to get in between it and the roof if you tried.

Meanwhile the farmers foregather on the planked road to the wharf-boat to talk crops. There's nothing to keep them, for the hay is tagged to a consignee in the Falls or in the Queen City, who has either bought it outright or markets it on commission. But the farmers give as an excuse for "hanging 'round" that they want to see it off, when as a matter of fact they want to loiter and "see the boat come in."

By and by the big mail-packet comes 'round the

bend, whistling its coming. From all over the town the farmers and villagers now hie themselves to the shore to watch its arrival. Folk get off and folk get on, and meanwhile the negroes put the hay on board the steamer. With their little hand-drays they form an endless circuit of men coming to shore for hay, taking on a bale, rolling it in, returning for another. Human automatons is all you can call them. But they *do* get the hay aboard. By and by that steamer is laden with hay as other boats on the lower river are laden with cotton bound southward. Then on she goes up-river, let us say. At the next town and the next and the next this program is repeated. Day after day the same thing

culture. He is thirty-five years old and a graduate of Columbia University and the College of Physicians and Surgeons. He also had a special course of training in chemistry and physiological chemistry in German universities, and was head of the Department of Biological Chemistry at the Harvard Medical School from 1906 to 1908. Dr. Aisberg has been highly recommended to Mr. Taft by scientists throughout the country.

Since Dr. Wiley resigned but little has been done in the way of new work by the Pure Food Board that the public is now aware of; but it is understood that the present problem of the Board is the labeling of beer, that involves some difficulties.

[For the "American Elevator and Grain Trade."]

HIGH COST OF LIVING: CAUSE AND CURE.

BY T. P. RIDDLE.

America faces a crisis. If a hostile fleet were approaching our shores, it would be a cause of less concern to the rank and file of our citizens than the high cost of living problem, a problem that fundamentally is a problem of agricultural supply and demand. Agriculture is the basic consideration of modern economics. Here in America it is not only the chief source of wealth production, but it is also the dominant factor in social and political affairs. Agriculture is a barometer of peace and prosperity. As agriculture fares so fares the Nation.

Agriculture in Ohio, as elsewhere in America, has fared badly because of a lack of farm labor and because of a lack of scientific farming knowledge and application. Scarcity of farm labor has cut Ohio's farm acreage average from 125 acres per farm in 1850 to 88.6 acres in 1910. The call, or, rather, the mis-call, of the city, has lured our boys and girls from the farm, where they are needed, to the city, where they are not needed. Twenty-five years ago 55 per cent of our population was on the farm. Today only 47 per cent is on the farm. This is alarming. Greece and Rome went down to their death when the population became congested in the cities and the farms were neglected. Let us take warning.

A lack of scientific farming knowledge and application has caused Ohio the loss of millions in wealth in the last decade. The soil fertility depletion has been shameful. Wheat illustrates the effect of our disregard for soil fertility conservation. Ohio's past ten years' wheat average of four-

DR. WILEY'S SUCCESSOR.

One of the peculiar hesitations of President Taft is the delay in filling the desk of Dr. H. W. Wiley,



INTERIOR OF OHIO RIVER WHARF BOAT USED FOR HAY STORAGE.

vacant now for some months. Some weeks ago the rumor went out that Dr. Doolittle, now acting chief of the Bureau of Chemistry, would be appointed, but no formal notice of the fact has as yet appeared. More recently it was sent out from somewhere that Dr. Carl L. Aisberg would get the place.

Dr. Aisberg is now the chemical biologist in charge of the poisonous plant laboratory of the Bureau of Plant Industry in the Department of Agri-

teen bushels shows a loss of four bushels per acre as compared with her eighteen bushels of fifty years ago. Demonstrating the possibilities of redemption, England, during the period of our decline of four bushels per acre, increased her average yield from twelve bushels to thirty-eight, a gain of twenty-six bushels. What England has done, we can do.

What is scientific farming? In effect, it is the making of two kernels of wheat grow where one

grew before and making the quality of those two kernels better and the relative cost of production less. The difference between scientific farming and ordinary farming is the difference between full ears and nubbins, bumper crops and short crops, plenty and poverty, success and failure.

Food is the primal need of man. We get our living from the soil, and no one can be healthy, happy or wise who long separates himself from mother earth. Bankers, merchants, teachers, preachers and everybody else who eats, sleeps, and loves his country, should enlist in this cause of agricultural improvement.

OHIO DEALERS' MEETING.

FALL MEETING OF THE OHIO GRAIN DEALERS' ASSOCIATION—CORN THE PRINCIPAL PROBLEM ON HAND.

The regular fall meeting of the Ohio Grain Dealers' Association was held at the Niel Hotel, Columbus, on October 25. The usual subject, corn and its handling on a safe and scientific basis, with the view of the requirement of grading in the central market, was fully discussed. One of the features of the meeting was the attendance of Chas. D. Jones, Nashville, Tenn., president of the Grain Dealers' National Association, who made a brief address.

PRESIDENT'S ADDRESS.

The morning session was called to order by President E. C. Eikenberry of Camden, Ohio, who read an address as follows:

The annual fall meeting of the Ohio Grain Dealers' Association is entirely a business meeting. Occurring as it does on the eve of the corn harvest, this particular cereal has, as a rule, an important place on the program. Reports are made from every section of the state on the prospect as to yield and quality, on the probable time when movement will begin and on probable price. Methods of handling and the disposition of early shipments receive their proper attention from both the country elevator operator and representatives of the central markets. In an informal way this meeting will be conducted so as to bring to those present as large amount of information as possible regarding the Ohio corn crop of 1912, as well as on other topics of current financial interest.

Since our spring meeting the grain dealers of Ohio have labored with a crop of small grains, high in quantity but low in quality. It is not necessary to recite conditions that resulted in the large percentage of low grades of both wheat and oats; neither is it necessary to open any old wounds or to renew any unpleasant recollections, by a reference to the crimp put in the bank accounts of many of our members by their failure to handle this off-grade grain judiciously. One thing must be learned by every dealer in grain and that is, that a wider margin between price into the country elevator and price out of the country elevator must be secured when handling low-grade grain than when handling grain of good quality. This is plainly necessary to cover increased cost of grading into elevator, and conditioning; contingencies of grading and greater risk of grain arriving at destination out of condition, as well as natural shrinkage, which is always high on this class of grain. Hot oats in Baltimore or New York and weevily wheat in Toledo or Cincinnati, are mighty effective agencies in removing any symptoms of congestion in the region of the pocketbook. Low grades of grain should always be bought "safe." The buyer of every commodity with a fixed market value determines the margin that is "safe," and why the buyer of grain, a commodity that is bought and sold on a narrower margin of profit than almost any other commodity, should so frequently allow this margin to be dissipated by injudicious buying or careless and unscientific operations, can only be explained by the exceptional circumstances surrounding the business. It is safe to say that more men in the business of dealing in grain are content willfully to do business without a profit than are to be found in any other line of business. The producer of grain is entitled to a just and equitable price for his product, based on its actual grade; but the individual who provides the facilities for receiving and handling this grain, who provides capital for payment on delivery, and assumes risks of storage and transportation, is entitled to a fair remuneration, and the dignity and desirability of his business depends on his demanding and securing such remuneration. The average country elevator operator, and the speaker is one of them, is slowly and painfully securing an education along this line through the medium of unremunerative toil and the assumption of risks that do not afford a chance of gain in proportion to the risk assumed.

The judicious buyer of grain is not extortionate; he must know and appreciate the natural hazards of the business; must set a fair value on his investment and on his worth as a commercial factor in his community, and then confidently demand his just share of the increment of that community. No association, no efforts of an organization, will ever put the grain business on a higher plane in this State until reckless competition and price-cutting are eliminated and the commercially insane desire to handle this grain or that at a price that leaves little or no chance for profit is banished. There is no earthly reason why a grain dealer should feel

himself bound to bring certain grain to his station or his town, when the price he must pay to accomplish this piece of commercial stupidity is exorbitant and when the benefit to other lines of business in his town is a doubtful factor. This is plain talk; but we are all guilty, and even though loath to confess it, our financial statement at the end of the year throws the hard facts in our faces.

It is to be hoped that the corn crop will be handled on a safer, more scientific basis than ever before and that the primary merchant will endeavor to govern himself more closely by the requirements of grading in the central markets. As grain dealers we have been doing our full share in aiding better farming conditions and bearing our quota of expense in time and money in pushing various crop improvement campaigns. Time enough has elapsed since the inauguration of the crop improvement movement that some tangible benefit should have accrued. Are we securing the share of the increase to which our past effort and expense should entitle us? Every man who benefits his community should expect a commensurate reward. Are we content to pose in a doubtful manner as philanthropists, or are we securing this reward in more and better grain, with a corresponding increase in personal revenue? This view may seem sordid and selfish, but it is sound commercially; for it is not by the bread of philanthropy alone that we can live. Let us strip ourselves of any false modesty on this matter, confess that we want to see the farmer learn better how to farm that he may produce more grain and better grain, with the very good and sufficient reason that we expect as grain dealers in this manner to increase the volume of our business. We flatter ourselves that we are long-headed enough to see that our prosperity must follow closely on that of the farmer. Are we achieving results in this line of endeavor; and is it not a fact that efforts by different agencies along crop improvement lines lack co-ordination, with a consequent confusion of effort and minimum of result at maximum of expense? These are questions that may not seek an answer at this particular meeting, but will some day be seeking an answer at the hands of this and similar associations.

The Ohio Association has a body of loyal members. It needs more. Financially, its needs are not large; neither are the expenses of membership burdensome. We ask a prompt payment of dues by the members as they become due. To make the Association at all effective, it is necessary to have the financial support of the grain trade of the State. The Association should have on its rolls the name of every regular dealer in the State. It is designed to protect and promote the best interests of the grain trade of Ohio, and every individual in that trade should consider it a sacred duty to contribute his share toward its support. The Association cannot get along without you; neither would you like to get along without the Association.

As stated by the call for this meeting, issued from the office of the Secretary, any topic of timely interest or importance to the grain dealers of Ohio is a legitimate topic of discussion at this meeting. No set program is arranged and the discussion will, so far as practicable and profitable, be allowed to assume the direction desired by those present. The meeting is yours, subject to the one requirement that the time of its sessions shall be consumed in the consideration and discussion of matters that the majority of its members consider expedient and profitable.

President Jones of the National Association was then introduced, who said in substance: I recognize that in every meeting of this kind a great deal of time is lost that could be devoted to the business of the Association. I shall, therefore, not make a long speech. I am especially pleased to be here, first, because it is the Ohio Association that I have never attended before, and, secondly, because I couldn't turn down Uncle Joe McCord in anything.

Yours is the oldest grain association in existence, and is the grandparent of every grain trade rule that has operated for the improvement of conditions in the grain trade of this country. Your principles and ideas have spread extensively; and being a loyal grain association man myself, I am glad to get acquainted with you.

One section after another has followed in your footsteps, with purposes that have been laudable and whose accomplishments have been great. We now shudder to think how we ever got along without these trade rules which we now find so helpful. It is this getting together that has enabled men to trade together with confidence. I do not believe it would be possible for the grain trade to conduct its business on a sound basis without such organizations as you represent. We cannot do business without rules of commercial conduct. Associations have thrived and spread until it became necessary to have one association over all, and thus the national organization was formed. Its work is your work, and its success is your success.

President Eikenberry: This meeting has been conducted heretofore as a corn meeting. Our crop is ready and we will listen to reports as to the quantity and quality of the crop, at what time it is thought best to move it, together with the price at which it should move.

Nearly every county represented at the meeting was heard from. The expression which was almost universal for the State, that the crop in the territory represented was for the most part perfect. There had seldom been seen such a prospect, both as to yield and quality.

Some few of the dealers had taken in a little corn and shipped some out, but it was the general opinion that corn should not be shipped out before November 5 at the earliest; and there were some who advised not to ship before the 15th. About 40 cents was the accepted price at which it should start. Corn was carrying generally 28 to 29 per cent of moisture.

Chas. T. Pierce, speaking of the crop of Van Wert County, which he said was the best in five years, advocated the use of the moisture tester by all dealers. Out of 40 cars shipped to Buffalo last year, they had only missed the test on one car. Only by the use of the tester can the grain man keep a correct line on what he is doing. A moisture tester would pay for itself on the first car shipped.

P. S. Goodman of Chicago was called upon for his opinion on the corn outlook generally in the corn growing states. Mr. Goodman said in part:

I expect the final Government reports will make the corn crop thirty-one hundred million bushels. This increase is in the seven leading states of Ohio, Indiana, Illinois, etc. The Southern crop of corn is below a year ago. The East is about the same as last year. The whole program is one of hog consumption. Last year we marketed the largest percentage of corn in our history. The surplusage this year to be marketed will, of course, depend upon the general feeding situation. It will take another



OHIO GRAIN DEALERS AT COLUMBUS, OCTOBER 25, 1912.

year to overcome the loss from hog cholera of last year and this year.

I don't know what you can do with your oats. I expect to see more of them exported than for some years.

The West is now a large seller of corn in anticipation of making early delivery. You are confronted with a great car shortage; and if I were you, I would not sell corn. We are 32,000 cars short now, while a year ago we had 200,000 more than we needed, and coal has the right of way. The big cities must have coal.

I do not believe that the price of corn will return to the low basis of a few years ago. We have had everywhere a large crop, but the shipments have fallen off. I would not be surprised to see a large export business.

Prof. McCall of the Ohio State University spoke of the cob rot, samples of which he had brought to the meeting. This was found, he said, in very much of the Ohio corn this year, and at the Ohio State University farm there appeared to be about 20 per cent damage from this cause.

AFTERNOON SESSION.

President Eikenberry called the afternoon session to order at 2 p. m. and introduced O. P. Gothlin, chairman of the Public Service Commission of the State of Ohio, who spoke upon the question of car supply. Mr. Gothlin said he knew of no more interesting subject for the grain dealer than that of car supply. In 1907 there was a car shortage, followed by an oversupply. In August of this year there again began to be felt a shortage of cars. He then read an excerpt from the law requiring railroads to furnish cars to meet requirements.

Continuing, Mr. Gothlin said that first it was the obligation of a railroad to be ready with an equipment. It would, however, seem difficult to force a railroad to put on an increase of 40 to 60 per cent supply when not needed and when the future was unknown. The statute does not require a railroad to keep a car equipment on hand to meet unexpected emergencies, but the railroad should try to keep posted, so as to meet requirements. The question as to what should be done so as to require the railroad to meet the added demand was almost unsolvable. It is not always a question of lack of cars, but lack of tracks and power facilities. Cars should be moved more rapidly than the average rate, which is only twenty-three miles per day, as the slow movement affected the supply.

He closed by saying that in his opinion, if the railroads give the shipper his just proportion of cars that is about the best it can do. Shippers should always keep a car record book and always request cars in writing.

Chas. E. Groce of Circleville proposed the following resolution, which was adopted:

Whereas, The action of the Official Classification Committee in fixing the minimum for wheat at 60,000 pounds, corn at 56,000 pounds, and oats at 40,000 pounds, prevents shippers from using cars of less capacity than above indicated, although such cars are many times available, thereby working great hardship to shippers in the Central Freight Association territory; therefore be it

Resolved, That the Ohio Grain Dealers' Association, in convention now assembled, does hereby most earnestly protest against such action, and hereby directs its Transportation Committee to use every effort before the proper authorities to secure a modification of the rule, whereby cars of smaller capacity, when available, may be furnished shippers.

A motion made by S. H. Grimes prevailed, that the thanks of the Association be extended to the millers and grain dealers of Columbus for the hospitality shown to the dealers, in serving the mid-day luncheon to the Association.

Secretary McCord read a message from the Burns Grain Co. of Buffalo, to the effect that the rates at the Iron City Elevator would be the same for transfer as heretofore, to wit, $\frac{1}{4}$ c per bushel.

C. W. Wagner, a farmer of Arlington, spoke briefly upon crop improvement work.

Prof. A. D. Selby of the State Experiment Station at Wooster made a short talk on the cob-rot disease in corn. At the Station they are now studying the disease with the hope of successfully combating it. He requested dealers to send samples of corn to Wooster that were affected by the disease.

L. M. Smith of the Seed Trade Reporting Bureau, Chicago, read a paper on the use of the moisture tester.

T. P. Riddle of Lima, in a short address, said he trusted that every dealer in the State would interest

himself in the State Corn Show, which would be held at Lima January 7 to 11, 1913.

The meeting then adjourned.

NOTES OF THE MEETING.

E. H. Beer of Chas. England & Co. represented the Baltimore market.

This, said President Eikenberry, referring to hot oats, is a very burning question.

H. M. Beause of Gale Bros. Co. had the latest news from the Cincinnati market.

From Cleveland there came H. M. Strauss, F. E. Watkins, Fred Abel and Frank Cain.

The Association was indebted for market quotations to Rogers & Rutherford of Columbus.

L. W. Forbell of L. W. Forbell & Co., New York City took the time from a busy season to attend the meeting.

The Pittsburgh market was represented by George Jaeger of J. W. Smith & Co. and John Dickson of Geidel & Dickson.

H. J. Niswonger of Arcanum brought two ears of corn which were just out of the field and especially dry for the season of the year.

Machinery interests were looked after by A. S. Garman, with the Huntley Mfg. Co., Silver Creek, N. Y., and J. E. Gambrill, representing Sprout, Waldron & Co. of Muncy, Pa.

Chas. T. Pierce of Van Wert made the closest guess on the amount of moisture in corn on which a test was made at the meeting. Mr. Pierce's guess was $24\frac{1}{2}$ per cent and it tested 24.

Dewey, Blanchester; C. R. Wagner, Arlington; J. Ralph Pickell, Chicago; A. B. Beverstock, Lexington; J. L. Doering, Antwerp; Chas. O. Peters, Columbus; H. G. Dehring, Curtice; J. I. Smith, Circleville; C. H. Grams, Marietta; S. J. Aungst, Lebanon; S. B. Swope, Amanda; Fred Kile, Kileville; E. R. Wooley, Pickerington; Burton Cain, Outville; E. N. Barr, Stoutsville; C. K. Patterson, Piketon; F. D. Brandt, Van Wert; C. W. Mallett, Columbus; H. Townsend, Irwin; A. Felty, Columbus; Myron A. Silver, West Jefferson; L. M. Smith, Chicago; O. M. Clark, Cuble; F. W. King, Lockville; A. E. Huston, Amanda; Chas. T. Pierce, Van Wert; E. O. Teegardin, Duvall; H. S. Heffner, Circleville; J. A. Resler, Caledonia; N. Morton, Columbus; John Noon and Wm. Crayton, Plain City; E. A. Grubbs, Greenville; J. W. Teegardin, Duvall; E. Stritmatter, Portsmouth; J. A. Crawford, Washington C. H.; F. P. Hastings, Cedarville; A. D. Selby, Wooster; D. W. Galehouse, Wooster; E. W. Spreng, Lebanon; Joe Wolcott, Convo; H. W. Wolfey, Prospect; C. E. Morris, Waldo; R. G. Calvert, Selma; Jas. P. McAllister, Columbus; J. P. Grundy and A. A. Coffman, Carroll; A. F. Herr, Groveport; A. G. McCall, Columbus; G. W. Lamb, Hooker; T. P. Riddle, Lima; W. H. Field, Columbus; J. H. Sark, Ashville; T. Baughman, Columbus; W. T. Palmer, Celina; J. S. Dewey, Blanchester; W. S. Cook, Columbus; J. B. Seymour, Kenton; R. A. Chenowith, London; J. B. Van Wagenor, London; G. A. Payne, Columbus; Harry Brandt, Carroll; C. W. Baker, Kinderhook; K. B. Seeds, Columbus; C. A. Powers, Genoa; J. T. Vent, Sedalia; John E. Bacon, Chicago; J. E. Pafenbach, Columbus; H. H. Bremerkamp, Decatur, Ind.; C. S. Mason, Delaware.

EASTERN GRAIN COMPANY.

One of the largest and most successful distributors of grain and grain products in the New England States is the Eastern Grain Company of Bangor, Me., but whose operations are carried on both



PREMISES OF EASTERN GRAIN CO. AT PITTSFIELD, MAINE.

The author of the red letter, Fred Mayer, as well as "Kent" D. Keilholtz, also of approved literary fame, both of Toledo, helped make a successful meeting.

Mr. Wells of Quincy drew the inference that, since members did not accept with alacrity President Eikenberry's invitation to occupy the front seats, they were used to going to church.

The Association was again the guest of the grain dealers and millers of Columbus at the mid-day luncheon. This has become one of the great attractions of the meeting.

The attendance included the following:

J. S. Harshman, Snyderville; J. W. McCord, Columbus; C. O. Garver and A. H. Cratty, Columbus; E. T. Custenborder, Sidney; W. M. Latham, Hayden; H. S. Grimes, Portsmouth; Chas. D. Jones, Nashville; C. E. Gross, Circleville; A. J. Caldwell, Wheeling, W. Va.; W. P. Salladay, Ashville; P. S. Goodman, Chicago; G. Collier, Springfield; C. K. Hunsicker, Williamsport; H. W. Fish, Mansfield; V. H. Clough, Mechanicsburg; E. M. Crowe, Piqua; J. E. Wells, Quincy; L. W. Forbell, New York; A. T. Ward, Lima; C. W. Portius, Lewisburg; D. F. Taylor, Canal Winchester; G. O. Noecker, Carroll; W. A. Nisonger, Quincy; H. J. Niswonger, Arcanum; P. S. Potts, Camden; W. Hall, Unionville Center; E. C. Eikenberry, Camden; F. C. Bain, Elrod; O. F. Furrow, Fletcher; L. R. Spencer, Piqua; O. T. Roszell, Troy; W. O. Toms, Prospect; R. F. McAllister, Columbus; H. M. Brown, Mechanicsburg; Carey L. Bright and Chas. M. Shepard, Christiansburg; Harry Rapp, Sabina; J. W. Channel, Melvin; L. W.

at Bangor and also at six others of the leading distributing cities of Maine, such as Portland, Pittsfield, Oldtown, Milo, Corinna and Rockland. The company was organized in 1902, being the union of several older small companies, the present officers and directors being H. O. Phillips, president and general manager, Portland; Chas. R. Bond, treasurer, Bangor, and Wm. M. Bigelow at Pittsfield.

One of the seven plants of the company is shown in the accompanying picture, the elevator in question being the company's branch at Pittsfield. The main building is 40x100 feet in size, and is equipped with four stands of roller mills run by electricity for the manufacture of feedstuffs. It has elevator storage capacity for 50,000 bushels of coarse grains and warehouse room and facilities for handling fifty cars of flour and feedstuffs.

The plant at Pittsfield, being as it is but one of seven operated by the company, gives an idea of the business of the company, which is without doubt the largest buyer and distributor in Maine of Western grain and the flours and feedstuffs of the leading millers throughout the country. In the past ten years the company has come to be in fact one of the large and successful business establishments of Maine and the recognized leader in its line in that state.

EDINBURG CORN MARKET.

The new corn market at Gorgie, a suburb of Edinburg, Scotland, is interesting because it is different; we have probably nothing like it in this country, because its functions are unlike those of our own corn exchange, although the business transacted there necessarily is a part of the great international trade in grain, in which in a singularly intimate way the entire United Kingdom is interested.

It is not, as *Milling* (from which the facts and the pictures are taken) says, in but near the Scot-

cereals, while nearly one-half (49.1 per cent) was contributed by hay and forage, and over one-fifth (22.6 per cent) by forest products. The remainder, representing in value 22.8 per cent of the total, consisted mostly of potatoes and other vegetables and fruits and nuts.

COTTON B/L FRAUDS DECISION.

The Supreme Court of New York, appellate division, on October 26 affirmed the judgment obtained in the lower court by the Hanover National Bank in the suit brought against it by the New

[For the "American Elevator and Grain Trade."]

PHILADELPHIA'S EXPORT TRADE.

WHAT THE RAILROADS AND THE CITY GOVERNMENT ARE DOING TO IMPROVE THE CITY'S EXPORT TRADE.

BY E. H. ROSENBERGER.

Philadelphia is beginning to do things. The commercial and transportation people are beginning to understand one another better. This is beginning to show in marked results. The port is not only going to have a new grain elevator, but the latter is to be most complete in every way. New piers are being built to take care of the export business, and others are to be built so that in a very few years this city will rank with any of the North Atlantic Coast ports in the facilities for handling its export and trans-Atlantic trade. Philadelphia is just emerging from a state of agitation which has held business conditions in a state of continual turmoil. This was due to a spirit of antagonism to the railroad interests, largely due to misapprehension and misunderstanding. Much of this has been cleared up, although occasionally there still are outbreaks which result in unpleasant relations and which serve to create a wrong impression in the outside business world.

One of these outbursts has just been cleared up in connection with the new grain elevator to be built at Girard Point by the Pennsylvania Railroad Company. The manner in which the contracts were awarded, or, rather, the fact that the several contracts awarded did not cover all the work to be done, gave rise to a report among the exporters and members of the Commercial Exchange that the company was again trying to humbug the exporting people of the port. This confusion has now been cleared up, and the grain men of the Exchange have every assurance that the company is to give the port everything that was promised and everything they can hope for.

It is quite true that the port has needed this elevator for many years, and for many years the Railroad Company held out hopes to them that a new elevator would be provided. Time went on and nothing but promises was in evidence. In the meantime, covering a period of four or five years, there were charges of discrimination by the railroads, resulting in a half dozen suits being filed be-



FACADE OF THE CORN MARKET AT GORGIE, NEAR EDINBURG, SCOTLAND.

tish capital; therefore, for obvious reasons, the building has none of the palatial characteristics that distinguish most of the great grain exchanges of the world. The Gorgie market is "just a corn exchange and nothing else." Built of grey stone, it has an impressive entrance, with a loggia supported by Doric columns, and it covers little less than an acre of ground. The exchange hall is 165 feet by 92½ feet. Along the sides are placed merchants' stands against the walls. A wide vestibule leads into a transverse corridor with double swing doors leading into the hall.

Every facility for carrying on business has been provided. There is a large business and settling room and another of similar size for trade meetings; four banks have branch offices there; and there is a postal-telegraph office and a series of telephone call offices having connections with the Central Exchange in the city.

A large proportion of the roof is glazed so as to permit of a thorough inspection of sample grain in any part of the building. For the better exclusion of vermin the floor is asphalted. Steam radiators preserve a comfortable temperature when artificial heat is needed.

RECORD CAR WEIGHTS.

Weighmaster H. A. Foss of the Chicago Board of Trade, in a recent note to the editor, says: "For the benefit of shippers who seem to be trying to break the large car record, I give below the records of the Chicago Weighing Department with reference to large cars:

	Pounds.
Kaffir corn.....	107,970
Oats	112,420
Barley	113,000
Rye	110,290
Corn	142,450
Wheat	124,360

The new grain elevator at Glasgow, Scotland, will be 312 feet long, 72 feet wide, and 160 feet high to the cope of the elevator tower. The outside walls are being constructed of brick work with columns of cast iron, and the floors of steel joists and concrete. The bin walls are of reinforced concrete clothed with 9-inch brickwork. The capacity of 20,000 tons of grain will be divided between two sections, each practically complete in itself and of about equal size.

The general character of New Hampshire agriculture is indicated by the fact that only 5.5 per cent of the total value of crops in 1909, as enumerated by the Census Bureau, was contributed by the

York Cotton Exchange firm of Springs & Co., for the recovery of approximately \$40,000.

This case is the first of the judicial proceedings instituted in connection with the losses sustained a year or two ago by cotton merchants as a result of the fraudulent bills of lading issued by the defunct firm of Knight, Yancey & Co. The action was brought by Springs & Co. to recover money paid to the Hanover National Bank on a forged bill of lading for 600 bales of cotton with false certificates of insurance thereof and a draft attached thereto, which payment was made in the belief that the bills of lading were genuine; that the cotton had been delivered to the railroad companies and was in



INTERIOR OF THE CORN MARKET AT GORGIE, SHOWING CORN MERCHANTS' STANDS.

transit; that the certificates of insurance covered actual cotton and that the banks had legal title to the bills of lading, the certificates of insurance and the draft, and had been careful to ascertain that the bills of lading were genuine before paying out their money therefor—all of which were mistakes of fact that Springs & Co. claimed entitled them to recover for money had and received for their use.

When the case was first tried, Springs & Co. obtained a verdict; whereupon the Hanover National Bank moved for a new trial, which the court finally allowed, an order that the upper court approved; and upon the second trial the verdict was in favor of the Bank, which judgment has been approved. The next step will be an appeal to the Court of Appeals at Albany.

fore the Interstate Commerce Commission, in which the railroads were the defendants. Thousands of dollars were spent during this time by the commercial interests in fighting these suits, with the result that not a single victory of importance to the port has been obtained. This fever of antagonism has about spent itself, and in its place a policy of co-operation has been adopted which now promises great things for the grain interests and the port. When the Pennsylvania Railroad Company announced its intention to build an elevator the company took the Commercial Exchange into its confidence and asked for such advice and counsel as would result in giving Philadelphia the best elevator adapted to its needs and one which would rank as the best known to the engineering ability of elevator constructors.

Right here it is fair to say that out of the warfare that has been waging against the corporate interests, and the domination of corporate interests came results that have placed the Commercial Exchange of Philadelphia on the highest plane as a fair dealing body and one having for its object the conservation of the interests of the buyer and seller alike. One of the results has been the reorganization of the inspection department and the general upbuilding of the executive department of the Exchange in a manner which has won for it the confidence of buyer and seller alike in the entire trade the world over.

When the Railroad Company asked for suggestions on the part of the Exchange as to the character of an elevator to be built, the Exchange at once named Capt. John O. Foering, the chief of the inspection department. He was delegated to represent the Exchange; and he at once interested himself to the extent that the new elevator in its every detail will be modern, efficient, and capable of handling grain as no other elevator on the Seaboard can handle grain. He made numerous suggestions for changes and betterments in the plans, all of which were adopted.

When the contracts were awarded, they called for dredging on one side of the pier only; and immediately a howl was raised that the company intended to back down from its announced intentions. The newspapers took the matter up, and for two days the commercial interests were in an uproar, fearing that the Railroad Company would build an elevator which would be inaccessible to ships coming to load grain. A meeting of the grain committee was called and they prepared a protest which was taken to the board of directors, who in turn forwarded the same to the officials of the Pennsylvania Railroad Company. The latter immediately made reply in a manner entirely satisfactory to the Exchange, proving that the members of the Exchange were laboring under a misapprehension and that they need have no fear as to the ultimate outcome. One of the officials of the company explained that their purpose was to award the contracts immediately so as to push the work as rapidly as necessary and that the other contracts were to follow later. As a result the construction work of the substructure is now under way and will be completed by the time freezing weather sets in, so far as the pile driving work and the placing of the cement foundation work is concerned. This is to be followed immediately by the erection of the bin and the elevator structure proper. An official of the company explained that the corporation was not in the habit of doing things by halves, and so far as this elevator was concerned would pursue its policy of building for the future.

Very good descriptions of the elevator have been printed in your columns, but it may not be amiss to point out to the grain trade that the new elevator is to be fitted with electrical machinery throughout, so that every department may be operated to its full capacity without interference with the work in other departments. The facilities of the plant will permit the unloading of 180 cars of grain in ten hours' time; 60,000 bushels of grain may be loaded in steamers every hour. The cleaning department will have a capacity of 20,000 bushels an hour. There are to be four large sized Invincible Cleaners installed in this department. In the drying department 3,000 bushels of grain can be handled every hour. The total storage capacity of the elevator will be about 1,100,000 bushels. Two full cargoes and two barges may be loaded at the same time. The elevator proper is built back from the bulkhead about 400 or 500 feet, and four conveyors will carry the grain from the elevator to the ships, each having a capacity of 15,000 bushels an hour. These conveyors will be about 1,000 feet long. There will be twelve unloading hoppers under the railroad tracks, of 2,000 bushels' capacity each. The unloading tracks will hold two cars at one time. There will be six of these unloading tracks, so that twelve cars may be in position for unloading at one time. Four belts will lead from the hoppers to the elevator, carrying 15,000 bushels each to elevator legs of equal capacity. Scale hoppers on the scale floor and

garnerers to reach the elevators will have a capacity of 2,000 bushels each. Three shipping legs from the storage bins will have conveyors for loading with 15,000 bushels each, connecting with garnerers and hoppers at top of elevator legs of 1,400 bushels' capacity. Two elevator legs from the four Invincible Cleaners will have a capacity of 10,000 bushels an hour each. Elevator legs from the drying machines will be of 3,000 bushels' capacity and with screening elevator legs will take care of the refuse. Suspended thermometers in the storage bins will be electrically connected to show the temperature of the grain in any part of the bins on indicators in the office. Such are a few of the points incorporated in the great structure now building for the Philadelphia grain trade.

This method of co-operation between the commercial interests of the city and the railroads, lacking for a long time, is evidencing itself in other departments of the shipping interests of the port. The same spirit has taken good hold between the Dock Department of the city government and the railroads, as well as in the digging of the deeper channel for the accommodation of the ships which are to care for the city's export trade. One magnificent pier has recently been completed; another is now building, both for the city; and the Philadelphia & Reading Railway Company is building a shorter pier which, by an arrangement now under negotiation between the city and the railroad, is to be extended and to form one of a group of three municipal piers to be constructed within the next few years.

There exists at Philadelphia what may figuratively be termed a "stone wall" to the interchange of traffic between the railroads, except at great inconvenience and cost to the shipper. This is the impossibility of a free interchange of cars, one railroad with another, without their being sent to some distant suburban point for the transfer, with the doubling of the ordinary charges on such transfers. The commercial organizations have been working to have a switching arrangement perfected, but with little success. The building of the municipal piers will help here; for these are thrown open to all railroads serving the city, belt line connections being made to such piers. This step is taken by shipping men to mean the solution of this problem. Negotiations now in progress along sane lines is bringing about a solution of this problem, which has for its object the opening of commerce to free access to all railroads entering the city, and the opening up of genuine competitive conditions.

Under the new order of doing things Philadelphia grain men have little to fear so far as meeting competition with other ports is concerned. When it became apparent that the country would yield a bumper oats crop, to be followed by an immense corn yield, Baltimore began chartering vessels to carry export oats to foreign ports. Twenty ships were chartered within half as many days, while Philadelphia failed to charter a single vessel. A "hue and cry" was immediately raised that Baltimore was gobbling up the export trade while Philadelphia exporters were sitting idly by in their apathy. Philadelphia is, however, getting her share of the export business, and is reaching out for more. A careful inquiry into the situation develops the fact that this market is far better situated than Baltimore and need not concern itself to the same extent to get tonnage to handle its export trade. Philadelphia is possessed of more line boats and is adding continually to its steamship lines, all of which are open to Philadelphia exporters for booking grain cargoes. While Baltimore entered the market early for the chartering of its steamships, Philadelphia has since chartered a number of ships to handle its excess exports, or such as can not be handled by the regular line steamers. All told, Philadelphia will have one of the most successful years in its grain trade that it has ever had, and it is rapidly forging to the front as a favored port by foreign buyers seeking American grain.

The champion corn grower of Texas in 1912 is Earl Davis of Palestine, who, at a cost of 5½¢ per bushel, got 122½ bus. from a single acre without irrigation or fertilizers.

E. WILKINSON.

One of the most conspicuous members of the grain and hay trades in the great Southeast is E. Wilkinson, president of the National Hay Association and manager of the Western Grain Company of Birmingham, Ala. Those who know Mr. Wilkinson realize that he is a true New-South business man—energetic and methodical, a leader in the best practical things in business ethics, not as an ideal only but as a common, every-day rule of practice. Although thoroughly acclimated to the South, Mr. Wilkinson is a Western man—an Illinoisan, in fact, having been born at Morris, Grundy County, one of the old Illinois River settlements, dating back to the 'thirties. There he achieved the education that comes to an industrious boy who is forced by cir-



E. WILKINSON.

cumstances to leave school at the age of sixteen and to hustle for himself from then on. His first job was in a factory at 6½¢ per hour.

This wasn't much—not, at least, in the eyes of a boy of sixteen of today who needs that much hourly for "smokes," perhaps; but young Wilkinson saved enough after several years of hard work to get out into western Kansas and into the grain business there on his own account. But Kansas twenty-four years ago was different; it had a habit of periodic breakdown and going broke, for reasons that do not always seem quite explicable to the later day-Kansan even, to whom Kansas is like charity—it "never faileth." In one of these temporary collapses, Mr. Wilkinson, who had long had a desire to see something of the South, went from Kansas to Birmingham, Ala., then a town of magnificent possibilities which have since been realized in large measure, yet with its future ahead and not behind it industrially. With a foresight not given to all who saw Birmingham in those days, Mr. Wilkinson "pitched his tent" in the then coming great iron town of the New South. After about one year spent in "finding himself" in his new environment, he organized the present Western Grain Company to handle Western grain as well as hay, flour, feeds, etc. The subsequent success of the company is known to the trade.

FRIGHTENED AGAIN.

With wars in sight and rumors of war afloat some good people in England are again in alarm at the potential effect of a war on the bread supply of the British Islands, and a resurgence of expedients for preventing a famine has appeared. A typical long range palliative is suggested by Chas. Bathurst, a member of Parliament, in a pamphlet, entitled, "To Avoid National Starvation," in which he says:

"To ensure that a considerable proportion of the home supply is always available for national needs in a national emergency, either government gran-

aries should be established, or direct encouragement should be given by government to those producers who undertook to keep their wheat in stack and available for national use for a period of at least six months after harvest, or, if thought desirable, both these policies could be adopted concurrently. There is no better granary than the farmer's stackyard. Let the difference between 35s. per qr. (\$1.05 per bu.) and the current price of wheat be paid as a bonus to every producer of sound wheat of good baking quality in the kingdom. The supply of unsold home-grown wheat, which is highest in September shortly after harvest, steadily decreases during the successive months, the rate being accelerated as from the beginning of February until August, when the home-grown crop is practically exhausted. To obviate this tendency, an additional bonus of 1s. per qr. (3c. per bu.), should be given to farmers in respect of their wheat of good quality still in stack in their yards on and after February 1, 4½c. for that so retained on and after March 1, 6c. in respect of that available during April and May, 7½c. during June and July, and 9c. during August.

M. F. DUNLAP DEAD.

M. F. Dunlap of O'Fallon, Mo., died at his home after but a week's illness, on October 14, at the age of 64 years, leaving a widow and three children.

Mr. Dunlap was a native of Illinois, but many years ago removed to Missouri, and had resided in O'Fallon for at least thirty years. There he was long engaged in the grain and milling business, being a stockholder in the Woods & Dunlap Milling Co. He was also president of the Bank of O'Fallon. Mr. Dunlap was a consistent member of the M. E. Church and a member of the board of curators of the St. Charles College, an institution to which he gave much thought and personal attention.

As a grain dealer Mr. Dunlap came into national prominence in 1905 when he was elected president of the National Association at the Niagara convention in June of that year. It was at a critical moment for the Association; for the then ensuing



THE LATE M. F. DUNLAP.

year meant life or death to the organization, most of whose affiliated associations (country dealers) had withdrawn and abandoned it to its fate. Under the wise management of Mr. Dunlap and Acting Secretary and Managing Director Henry L. Goemann the Association was restored to solvency and to the confidence of the grain trade and before the close of the year had entered upon a career of broader activity and influence than it had ever had before undertaken or exercised. To this work Mr. Dunlap devoted himself *qu'il put*, and won the respect and regard of all who came in contact with him—a man, not of brilliant parts, but sound of mind, thoroughly genuine, considerate and sincere,

[For the "American Elevator and Grain Trade."]

CONSERVATION OF RESOURCES.

WATER AN IMPORTANT RESOURCE—WHERE IT COMES FROM—ITS PART IN THE ECONOMY OF NATURE.

III.

BY JULIAN KUNE.

Before entering in detail into an inquiry as to the vast water resources which the United States possesses, I think it advisable to make a few explanatory remarks upon the source which supplies our earth with water. As it is well known, the waters of the earth have their origin in the heavens (the clouds) above; and after having performed their destined work on earth, by coming down from the clouds in the shape of rain, snow and vapor, they in part reascend to the clouds in the shape of vapor and in part pass from the land in the form of flowage. By flowage is meant the underground movement as well as the visible surface springs, brooks and rivers; by evaporation is meant the direct evaporation from the surface of the ground, from animate and inanimate objects and also the water which is taken up by plants and transformed as vapor through their leaves. As all students of botany know, foliage mechanically assists and condenses moisture. Water is the primeval constituent and primordial source of all living things; and running water is the most important constructive agency of the organisms of life.

The sole source of fresh water in the world is, therefore, precipitation, mainly in the form of rain and partly as snow and more slightly as mist and fog. Without this precipitation of water, the land would be barren and the earth a dead planet; without the vapors the earth would be uninhabitable, as vapor in the atmosphere tempers the climate and makes the atmosphere tolerable.

It may be said that our stock of water can be estimated only roughly. Although various figures of the volume are given by different scientists, it cannot be definitely asserted that any of them are correct, for there are so many still undiscovered sources which may change the result very materially, that we can but approximately give the sum total as furnished by various works on hydrology. The water of the world, then, is estimated to be equal to a volume of about four hundred and ten million cubic miles, of which nearly three-quarters occupies the depressions in the earth crust as seas; about a quarter, or one hundred million cubic miles, permeates the earth and rocks, as ground water, while the remaining small fraction is gathered in fresh water lakes and channels and is accumulated as ice and snow or distributed in the atmosphere in aqueous vapor. Temperature and the winds are the two great factors of evaporation. Forests play a great part in the conservancy of water, for they intercept the sun after a rain and keep the earth from packing hard under the beating of the rain and the baking of the sun. Forests decrease also the quantity of water that would otherwise pass rapidly off into the creeks and waterways immediately after rainfall and be lost in floods. Forests also lower the temperature and thereby reduce the velocity of the winds, causing less evaporation than occurs in the open. Tests have further shown that cultivated soils contain twice the amount of moisture carried by the uncultivated prairie land.

How much of this vast quantity of water in the world is allotted to the United States (aside from our insular possessions) can be only estimated from data drawn from books on hydrology. The mean annual precipitation is said to be about thirty inches. The quantity falling on the land, with the included water area, is said to be about two hundred and fifteen trillions of cubic feet, equivalent to ten Mississippi rivers. Of these 215 trillion cubic feet 100 trillions affect agriculture and other industries, mainly through climatic influences; 70 trillion cubic feet are available for water supply, for navigation, irrigation and power. This quantity is controlled in part and may be wholly controlled. The remainder, or 35 trillions cubic feet, is either consumed in plant growth or other chemical com-

binations or else permeates the deeper strata and passes ultimately into the sea.

WATER NOW A NATIONAL RESOURCE.

The conquest of nature, which began with the control of the soil and the products derived from it and passed to the minerals, is now extending to the waters above and beneath the surface; the conquest will not be complete until these waters are all brought under complete control. When the Federal Geological Survey was started, about three decades ago, very little was done directly for the development of the Nation's resources; water, which is now considered one of the most important elements, was then hardly thought of as being of any value. Now, however, the development of our physical resources comprises not only the cultivation of the soil with its variegated products, the minerals, and the forests, but it includes also the lakes and the rivers, as well as reservoirs for the rainfalls which make the land inhabitable and fruitful; and finally we have learned that a great asset lies in the undeveloped electrical power that is hidden in the waters of the country. It is, therefore, the duty of our governments, both Federal and State, to guard with a jealous eye this hidden power, which represents millions of horse power from being appropriated by private interests to the exclusion of the people to whom it legitimately belongs.*

I am tempted to quote here what W. J. McGee, secretary to the United States Inland Waterways Commission, says on this subject: "Our growth in agricultural production is unprecedented in the world's history and so our growth in population is so much more rapid that exportation of foodstuffs is declining. Our growth in mining outruns our increase in population. Our growth in manufacturing far exceeds that in mining. Our growth in the application of mechanical power is much more than the use of power." No more significant advance has been made in the country's history than that of recent years, in which our waters have come to be considered as a resource, definitely limited in quantity, yet susceptible of conservation and of increased beneficence through wise utilization.

Of the 70 trillion cubic feet running annually into the sea little more than one-seventh, or one hundred million cubic feet, is taken from rivers and lakes and protected catchment areas for municipal and community supply and related purposes. Less than 2 per cent is used for irrigation and 5 per cent may be reckoned as in use for navigation, while less than 5 per cent is wasted in freshets or destructive floods. M. O. Leighton, chief of the hydrographic branch of the Geological Survey, estimates that for municipal and community water supply there are protected catchment areas aggregating over one million acres and that fully \$250,000,000 are invested in waterworks, with nearly as much more in appurtenant catchment areas and other lands. The better managed systems protect the catchment areas by shores under forests and grass, and by these the water is completely controlled, the storm product is stored, and there is little waste.

As stated above, only within a comparatively short period has our Government embraced the water of the country in its list of valuable resources which should be conserved for the benefit of all the people and not merely for private interests. Heretofore the mistaken idea prevailed that our national resources were limited to the lands, forests and minerals. Private interests, however, keen observers of chances whereby to add to

*Our contributor here repeats a commonly repeated and accepted error. The water-power rights on all streams in this country, east of the Rock Mountains, with but two exceptions, both in the state of New York, are easements that belong only to the riparian owners, whether on navigable or non-navigable streams. The Federal and State governments have the legal right, each within its proper jurisdiction, to protect the navigability of all streams and to render navigable streams that are not naturally so; but in so improving the navigability of streams neither government thereby automatically acquires any ownership whatsoever in the water powers created by said improvement, the present and former Presidents of the U. S., the Governor of Illinois, and the trustees of the Sanitary District of Chicago to the contrary notwithstanding. Mr. Taft himself, as Secretary of War, in an Allegheny River case, recognized this principle of our law of riparian easements.—Editor.

their wealth and power, were quick to appropriate to themselves these rights which to the general public appeared of no value.†

Thus it has come about that some of the choicest National assets in Alaska have been acquired by private interests before the Federal government awoke to the situation. Just think of the coal lands which these private interests were recently compelled to restore to the Government by recent decisions of the Interior Department. They run into millions in value; and who can tell of the valuable water rights which have been obtained and not returned? I believe that we have similar rights

[For the "American Elevator and Grain Trade."]
THE STEEL BARGE ON ILLINOIS RIVER.
 MODERNIZING OLD METHODS OF HAULING GRAIN—THE
 POSSIBILITIES OF RESURRECTING CANAL TRAFFIC.

BY RAY F. FRAZER.

Since the Federal government opened the new Hennepin Canal, between the city of Hennepin on the Illinois River and Rock Island on the Mississippi River, grain elevators have been springing up like mushrooms along the canal and in the territory formerly touched only by the railroads. Elevator men generally are familiar with the advantages



UNLOADING STEEL BARGES WITH MODERN MACHINERY AT PEKIN, ILL.

nearer home, where water rights were secured by these private interests.

It is gratifying to notice that the late presidential campaign awakened some interest in the preservation of the vast unused resources. The platforms of all the several parties contained more or less positive allusion to this problem. It is certainly a subject which should have engaged the attention of our Government long ago; but it is better that this eleventh hour repentance has come than that it should not have come at all. Waterways are the arteries of a country through which its commerce may be carried on uninterruptedly and at a very much lower cost than by any other means. Water transportation is not a destroyer but a controller of the rail traffic of a country. In this country especially, it would have the tendency to check questionable methods and to improve the service and thereby do its part to reduce the cost of living. In countries where the railroads are largely owned by the state, there also we find the waterways most improved and freight rates are kept within reasonable bounds by their competition. The improvement of old waterways, as well as the creation of new ones, is, in my opinion, the only remedy for the rail congestion that periodically oppresses the country.

In Hungary, my native country, the waterways have always received and do still receive special attention from the Government, notwithstanding that the trunk railroad lines belong to and are controlled by the state. Almost every year new waterways and canals to connect the various rivers with each other are projected and opened. Millions are spent annually on the improvement of rivers and canals, in order to cheapen transportation. While some of our statesmen and politicians claim that the reduction of our high tariff would reduce the cost of living, which I am not inclined to dispute, the cheapening of transportation charges also would have a similar effect.

The first new corn reached Indianapolis on Oct. 26, there being four cars, all inspected for account of Bert Boyd. It was shipped from Illinois and was practically free from rotten corn. The grading was as follows: 1 car New No. 3 White, 1 car New No. 4 White, 1 car New No. 4 White, and 1 car New Samp. White.

†And which, until the electrical transmission of power became a fait accompli, in the form of water powers were indeed of comparatively little value.—Editor.

of transporting large bulks of grain by water, particularly in this time of car shortage. If the elevators are properly located, it amounts to chopping the freight rate per ton mile by rail in two or more.

The main drawback to such a method of shipping has been the problem of loading and unloading the grain. This was complicated, if the loading and unloading had to be done on a river where the rise and fall of the water had to be taken into account. Old style river packets are also very poor carriers for bulk grain. Yet the economy is so great that Ingenuity has applied herself to the problem, with happy results.

At Pekin, Illinois, on the Illinois River, the Smith-Hippen Company has taken up the pioneer work on modern lines and is making money by modernizing the old methods of using the waterways. They have pressed old canal barges into service and have also put into use some modern steel barges. Their boats are loaded through the hatches in their decks at the elevators along the Hennepin by gravity conveyors.

The most important part of their plan, however, is shown in the illustrations. This consists in building, first, an anchorage for the boats below their elevator and the railroad tracks at Pekin, and, second, in extending over the water a belt conveyor with an adjustable leg which can reach the cargo at any stage of water in the river, from the high water mark to the low water mark. The rubber belt conveyor drives the adjustable marine leg elevator.

"We have been able to make this business a success," said President J. C. Aydelott, "by the installation of modern methods—the building of elevators at accessible points on the river and canal and unloading in a consumptive market by means of machinery."

Some of the grain is placed directly in cars and reshipped to other markets.

The success of the Smith-Hippen Company has inspired others to copy their methods; and the Turner-Hudnut Company, also with an elevator at Pekin, who experimented with a pneumatic conveyor, is now installing one like that used by the competing firm, the Smith-Hippen Company.

The Western Grain Dealers' Mutual Insurance Association has amended its incorporation articles to provide for the maintenance of a reserve fund, in an amount equal to 40 per cent, and not to exceed 50 per cent, of one annual assessment on all

policies in force, at the rate charged for such insurance. It is also specified that any policy may be canceled providing the association has given the holder five days' notice.

[Special Report.]

MIAMI VALLEY GRAIN DEALERS.

CONDITION OF THE NEW CORN CROP—BUYING RIGHT THE
 MAIN TOPIC OF DISCUSSION—MR. COOK'S VIEWS.

A most enthusiastic and interesting meeting of the Miami Valley Grain Dealers' Association was held at the Phillips House, Dayton, O., on Friday, October 18. Thirty shippers were in attendance and there undoubtedly would have been many more had it not been for the rain. The purpose of the meeting was to discuss the condition of the new corn crop and how to handle it to the best advantage of the trade.

There was no fixed program. President J. E. Wells called the meeting to order at 1:30 o'clock and asked for reports of the condition of the corn crop. The acreage of corn was reported as considerably larger than normal in all localities, and the prospect for large yield of good quality was never better. The replanting of much of the corn made the growth somewhat uneven, and the late planted corn will be soft in some localities. But the fine weather during the fall has been just what the corn needed, and about three weeks from date of the meeting, it was believed, would make the grain safe to move. Farmers were then shucking corn throughout the territory, and some few cars had been shipped into Cincinnati; but it was the opinion of those present that corn was then not fit to crib and that the movement should be held off at least until about the second week of November.

President Wells made a good talk on buying off-grade corn at the right price. He said the farmer should be encouraged to sort his corn. If the farmer does not sort his corn, it should be sorted at the elevator and the loss charged off to the farmer. This is the only fair method of dealing with the farmer who endeavors to market good grain, and it is the fundamental means of preventing trouble in shipping grain.

Farmers throughout the territory, it was added, have large stores of oats, most of which are of much better quality than those moved during the middle of harvest. It was the opinion of those present that the movement of oats will fall off materially when corn is ready to market. Farmers will hesitate to sell their oats at 30 cents after having put them into their bins, and the supply of cars will



UNLOADING OLD CANAL BOAT AT PEKIN, ILL.

not permit a very great movement of both corn and oats. Many farmers are building new corn cribs to store at least a part of their corn crop.

Sec'y E. T. Custenborder advanced the proposition of a credit bureau for the purpose of furnishing members of the Association information regarding the business integrity and financial responsibility of "one-year" farm tenants. This is a class of farmers who never become permanently located but move year after year from one locality to another. Every elevator operator has had experience with such men at some time or other. This shiftless kind of farmer uses the elevator owner as a bank for borrowing money, seed oats, etc., to tide him over until harvest. Then, frequently, the fellow will haul his grain to his creditor's competitor and leave the community without settling his obligations. The purpose of the credit bureau is not to keep down the poor but deserving tenant who needs help, but to protect the grain dealer from the worthless and irresponsible class who never intend to pay their obligations. The idea of the credit bureau is that every grain dealer shall make a list of the names of such shiftless and unreliable farmers in his territory and send this list to the secretary of the Association, who shall keep the names on file. All members of the Association will then have the opportunity to obtain information regarding the reputation of these "transient" farmers.

After the matter had been discussed favorably by many dealers present, it was moved and seconded that the credit bureau be given a trial, and the motion was carried.

BUYING GRAIN BY GRADE.

Probably the most interesting and profitable feature of the program was a paper read by O. W. Cook of Maplewood on "Buying Grain by Grade," as follows:

So long as we are receiving merchantable grain everybody seems to think the grain business a sinecure; but just as soon as meteorological conditions act in a manner which we think does our crops injustice in growth and maturing, we are actually confronted with a terrible problem. The antecedent of "we" in this case is everybody, from the farmer up, who has anything to do whatever with the handling of unmerchantable grain.

I believe it is one of the most serious problems we have to attempt to solve, because there are so many gaps through which off-grade grain meanders to places whereby losses are generated; and when we are confronted with a bad crop we are up against distressing circumstances. Off-grade grain seldom betters good grain with which it is placed; it makes a poor speculative investment; it is something that the other fellow does not want; and it is practically a "bad egg" on our hands from beginning to end, regardless of applied discounts. All such remarks as these just spoken, however, are chestnuts, the shells of which are long since decayed and rotten.

Now, if we could just intelligently turn to our pharmacopoeia and get the right panacea for this commercial ailment, we would be considered as doing the subject justice. When the committee assigned me this subject, I was tempted to treat the matter as a joke, because it has been under discussion practically as many times as we have had meetings; but after reconsidering the assignment of the subject, I decided that about the only thing I could do would be to make an attempt, which, at the least, outside of theory, could be no more than my own experience in dealing with inspection of the farmer's grain.

Theoretically we all would advise strongly a strict grading of the grain received at our respective places, because we all know that grain ought to be bought on its merits, just as we purchase most every class of merchandise. I see that I have arrived at the point where it is necessary for me to state my own position with reference to this grading question.

For the present moment we will say that we are purchasing wheat by weight-test and oats and corn by sight-test.

Did you ever notice at many of the meetings we have held in this domain, how easily it has been for us to drift into the theoretical or abstract? While no achievement can come about unless there are preliminary ideals purely abstract, yet there should come a time in the course of development of said achievement wherein the theory must be eliminated entirely; and unless the resultant evolves into good, practical propositions, we had better examine our stock of theories pretty carefully before their presentation. I hope that you will not think that this thesis (while I am dwelling somewhat on the abstract side) is to be taken as a dissertation devoted to theory. We have had too much theory already, and our purpose should be to try to cut practical pieces and fit them to what has already been suggested.

It seems evident that we have not done as much as we ought to have done in consummating a system of inspection of grain received from the farmer, but we feel that we are getting a little nearer to what is just and right for the grain dealer, in trying to devise and execute rational plans to surmount the many difficulties with which we are confronted.

At present, owing to so many adverse conditions, it is practically impossible to execute a universal system of grading grain. In a measure, most of us are short in business ability. We are not educated along lines of strict business methods. We are more than amply supplied, however, with selfishness. Owing to our weakness in living up to ideals and standards of business, our confidence in our competitors is such that we do not play our part in carrying out our portion of what should be fair relations between ourselves and our competitors. In other words, we are slow in establishing precedents as business guides. We know that this has been the condition of affairs for years. Let us hope that we are progressing somewhat, for I feel that there are portions of our territory that are breaking away from old precedents and setting up new ones. The practice of using trade rules by our neighbor associations will verify this last statement. As we become better educated our older methods will eventually evolve into more up-to-date ones. This is the path over which we must pass to bring about a business-like method of grading grain.

The oats crop through our section this year has not been of the best on account of the amount of rain through the harvesting period. We have received some damp and bleached oats. We know what should have been done with the bad oats received; but I wonder how many of us bought them at the proper discount. Some oats were rejected at our station on account of dampness, but bleached oats were bought at No. 3 price prevailing. There were days, however, when we were paying less than surrounding points, owing to bleached conditions and dampness.

I think that at harvest time, if the crop is bleached and otherwise damaged, it is good judgment not to put on the board a No. 3 price. It is always easier to pay a premium than to exact a discount. We worked this plan successfully this year when receipts were heavy in off-grade oats. I suggest that in a year when we have damaged oats to handle, it is a good practice, when asked by the farmer prices on oats, to state in the answer that the quality will have much to do with the price quoted. It is easy to say: "Oats as they are coming from the machine now are worth so-and-so. They are more or less bleached, and according to discounts in terminal markets the price would be reduced on a scale." If you have the farmer's confidence (I say "you"—the Lord only knows whether we have or not), he will see that you are not applying the discount in order to fleece him. If you can convince the farmer that the discount is just, you have made a good stride in the grading question; therefore, use only facts in discussing discounts with your patrons. If you have to lie at all, tell a "white one." I feel that lying all the time is such a monotonous practice. I believe if you would just lie once in a while it would look better; would you permit me to advance the precept that not to lie at all would be a wonderful help in our business? Try it.

The association of which this one is a remnant, instituted some years ago a method of testing wheat which was efficacious, in our immediate territory at least; and the fact that we are still purchasing wheat by the same method further shows it to be a practical one. When a load of wheat comes to our elevator a bag inspection is made on the wagon before weighing to get a preliminary knowledge of about where the wheat will grade. If it is bad, it is a fact with which the farmer has been familiar longer than yourself, and it is not business courtesy on your part to speak in ill terms or to be otherwise than optimistic. Suppose that the wheat will test around 56 lbs., we would treat the case something like the following:

"Well, My Farmer Friend, we will see what test we can get from your wheat. You see, when we ship this wheat it has to undergo a similar inspection, and an inspection under 58 or 60 lbs. in the markets determines the discount we shall receive."

And as you make the test, if you are clever at entertaining, whistle something or recite a poem. Let me remark that if you can bring tears to his eyes by virtue of your entertainment, your grading will end propitiously; otherwise he may revert to a discussion of discounts that may sound irreverent. The point is: Be fair; treat him gentlemanly. After having made test from several bags, strike an average and candidly state to him that his wheat tests 56 lbs. He knows what No. 2 wheat is, and will be willing to accept the discount if you have the backbone to demand it. However, if there should be any smut, dampness or weevil in his wheat, it is an easy matter to refer him to your daily market letters wherein there are generally tabulated discounts.

Is not this a fair method? This surely gives us an inspection method through and by which we can buy the farmer's wheat at nearer the right price. This "right price" means all to the farmer the wheat is worth, leaving us a living margin.

I think it unnecessary for me to speak of the method used in computing the price per bushel, other than to say that the above wheat, free from smut, weevil, dampness, etc., would be bought for at least 56-60 of the prevailing price at time of delivery. Some dealers use in a similar case 56-58 of the prevailing price, which makes a more liberal purchasing basis.

Now, that I have dwelt a little on that part of my subject relating to oats and wheat, I am left with corn, the inspection and grading of which I am incompetent to discuss. The pure food affair was not such a bad one after all. Every farmer was familiar with the intent of the Government; and I believe if it were only a scare, as some think, it will have its effect; for I can not conceive that a conservative dealer will take any chances, if the original intent of the Government is carried out. Last year my competitor and I talked over the situation in a grave and sedate manner, early, before the corn was ready to ship, thinking that we had solved the mystery, and wondered somewhat why

our plans had not been taken up sooner by some other competitors less wise than ourselves, and much as we frequently do, we counted the chickens before the old hen layed the eggs. We deviated very little if any from our original plans, and then had troubles enough through the season. Quite a bit of corn in our section will be damaged this fall on account of the late planting and the replanted. There will be lots of good corn harvested by the more careful farmers, those fellows who take an interest in growing and delivering good grain, but the farmer who indiscriminately gathers this corn crop is the fellow to watch, when he delivers.

Our plan last year, spoken of above, was not to have any definite early bid to make to the farmer, unless we could first see the corn, and that every load should be watched carefully when being thrown in the dump, all bad ears were taken out and sent back. We would be free to tell our farmer friends, on their inquiring about the price of corn, that the quality of it would dictate the price, and that good corn would be worth so much per hundred pounds. While we will admit that the promoters of this plan had certain other restrictions, which were somewhat severe, we are pleased to state that no lives were lost in any of the transactions, and many that survived the ordeal of last fall will be convalesced sufficiently to play their part again this season. We must not blame the farmer, however; because if we are prone to make any agricultural donations, he is the logical receiver and will do just as we all do—get all we can when we sell.

If it were possible for us to make moisture tests of corn, we would be assisted wonderfully in its inspection. Mechanical contrivances, no matter how dilapidated, are looked upon by the farming fraternity as good or better guides to fact than any dealer's judgment; and we think it not impracticable that every country station be equipped with a moisture testing apparatus. I sincerely believe that if bad corn continues to come forth, such installment will be absolutely necessary; then you see how easy it would be to have tabulated on the board the same discounts for moisture that we get in the markets. What farmer would object to this method and do it conscientiously? None but the chronic growler. It would surely encourage the farmer who raises good corn. This is a good method. Many elevators are using the moisture tester on corn very successfully; and we will never buy off-grade corn in the right manner until some method similar to the above mentioned is used whenever there is the least doubt as to the grade of corn.

"Now I lay me down to sleep,"

Easily heard by his wife;

"I pray the Lord my corn to keep,

If ever I've prayed in my life.

The corn was damp and smelled out loud;

I paid too much, I know;

But lots of business makes me proud,

So, Father, I'll let her go.

"If I should die before I wake,

Lord, toot the market horn;

For Sally'll have the living to make,

On the profit of that rotten corn.

"I pray the Lord my soul to take,

If I'm guilty of this again;

I'll never, no, never, make such a break

As long as I live, Amen."

The subject of grading grain as bought from the farmers was fully discussed; and it was admitted by all that the methods had been entirely too lax; especially have the lower grades been bought too freely without making the proper discount. More stringent rules should be followed on this corn crop.

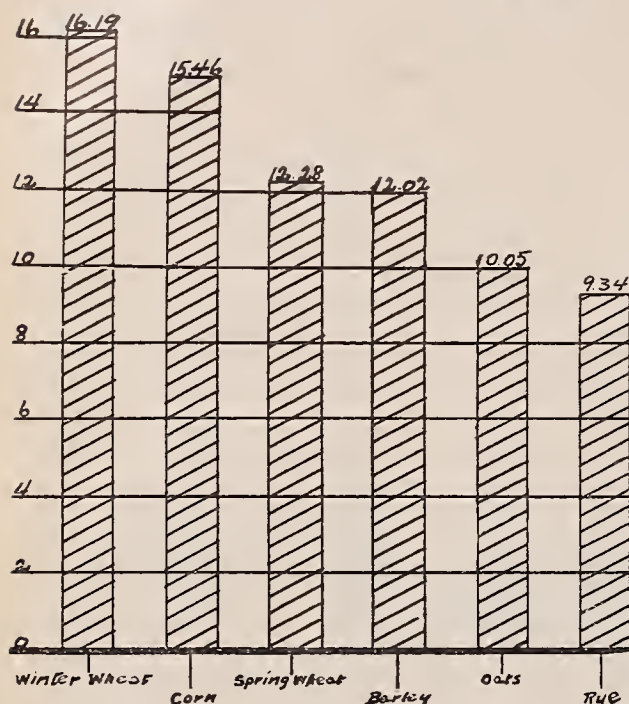
A motion to adjourn was carried, and every one repaired to the dining room, where they enjoyed a fine dinner at the expense of the "cash reserve" in the Association treasury. Every one proclaimed a very profitable meeting.

Those present were: Russell Allen, Troy; John Adlard, Lockington; Fred Brown, St. Paris; F. D. Brubaker, Rex; O. W. Cook, Maplewood; I. H. Coppock, West Milton; E. T. Custenborder, Sidney; J. C. Custenborder, Lima; C. N. Falkner, Kesler; Frank Felger, DeGraff; O. W. Farrow, Piqua; E. A. Grubbs, Greenville; Geo. W. Hoke, Brockville; W. B. Jackson, Sidney; Jos. B. Lehman, Kirkwood; W. G. Lewis, St. Paris; John Meyers, Pleasant Hill; Andrew Mohr, DeGraff; W. A. Niswonger, Quincy; O. T. Roszell, Troy; L. G. Shanley, Pemberton; Elmer Sheets, Botkins; Jas. L. Shepard, Christiansburg; J. W. Simmons, Pemberton; W. H. Persinger, Sidney; Fred Russell, Sidney; H. I. Staley, Dawson; Geo. Stephenson, Rosewood; J. E. Wells, Quincy; J. Ginn, Houston.

The first car of new corn from Illinois reached Chicago on October 17. It arrived in a heating condition, graded sample grade mixed and sold at 48c. Another car received on 18th arrived in good shape, graded sample grade and sold at 51c. Last year the first car was received October 13, and graded sample grade.

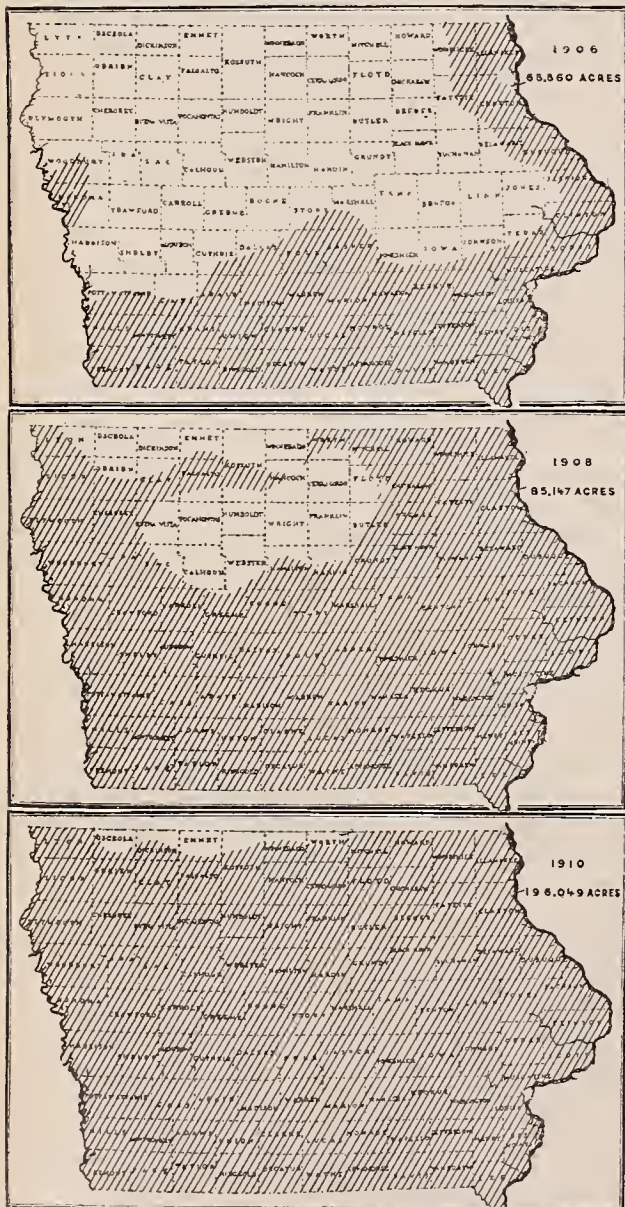
WINTER WHEAT IN IOWA.

Asked to name Iowa's most profitable grain crop one would unhesitatingly mention corn or oats, but according to a bulletin by L. C. Burnett, Assistant Chief in Cereal Breeding, at the Iowa Agricultural Experiment Station, both these cereals rank below winter wheat as a money crop. Of course this refers to returns per acre, since the total value of the winter wheat crop is considerably below that of either corn or oats. But taking the average yield



RELATIVE VALUE PER ACRE, 1906-1910.

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DISTRIBUTION OF WINTER WHEAT IN IOWA.

per acre and the average price per bushel for the crops of the state, winter wheat has given an average acre return of \$16.19, while the next best paying crop, corn, has an average of only \$15.46, and the other crops still less.

The profit in growing winter wheat in Iowa is illustrated in the accompanying figure, based on returns for the five years 1906 to 1910, inclusive.

It shows the relative value per acre of Iowa's principal cereals.

Although Iowa has raised winter wheat since the first pioneers settled in the state, it was a doubtful crop until twenty years ago, because the varieties used in pioneer days withstood the open prairie winters poorly. It was not until the introduction of Turkish wheat, obtained from Mennonite settlers in Kansas, that winter wheat became an important factor.

It is claimed that the late George W. Franklin, then a farmer at Atlantic, Iowa, was the first to grow this type of wheat. In 1885 he bought a load of rye and sowed it. Early the following summer, when the rye was heading out, he discovered that a large percentage of the crop was wheat. He cleared a portion of the field of rye and permitted the wheat to come to maturity. After sowing the wheat for several years Mr. Franklin obtained seed practically free from rye and found that he had a variety that would not winter kill. In 1886 he began sending out the wheat under the name of Hardy Turkish Red Winter wheat.

At first millers did not take kindly to the new wheat and would only purchase it at a discount of 5 to 10 cents a bushel under other varieties, claiming that it was too hard for milling purposes. Later it became softer and the millers learned how to grind it. And with this came the gradual extension of the winter wheat belt of the state. This is shown graphically in the accompanying maps.

MOISTURE CONTENT OF WHEAT.

Grain men and millers are taking an increasing interest in the moisture content of corn and wheat, for this is a matter of vital importance in the keeping quality of the grain as well as of the flour.

Naturally the most important question is how much moisture wheat may contain without incurring danger of spoiling in store. No determination of this has been made, nor is it likely that any maximum can be fixed upon which will hold for all seasons and conditions. For the moisture content varies with the different years. However, something is already done towards reaching a working basis by collecting data as to different grades of wheat in different years, and this the North Dakota Experiment Station has done and published the results as a contribution to the subject. In the table given below, the maximum, minimum and average percentage of moisture is given by grades for the years 1908, 1909, 1910 and 1911 up to October 20. The results were compiled by Mr. T. Sanderson, miller of the Experiment Station. The percentage of moisture determinations were made with a Brown & Duvel Moisture Tester, and a number of the samples were checked by drying a portion of the wheat in a water oven:

MOISTURE CONTENT OF THE 1908 CROP—BY GRADES.

	No. 1	No. 2	No. 3	No. 4	Re-
Hard	N.	N.	N.	N.	jected.
No. Samples	1	10	5	2	2
Minimum	15.0	9.7	11.6	11.9	10.7
Maximum	15.0	14.2	12.3	11.9	12.0
Average	15.0	11.6	11.6	11.9	11.3

1909 CROP.

	No. 1	No. 2	No. 3	No. 4	Re-
Hard	N.	N.	N.	N.	jected.
No. Samples	4	25	15	9	
Maximum	13.6	16.2	14.8	15.0	
Minimum	11.6	10.6	12.0	11.2	None
Average	12.2	12.7	13.0	12.8	

1910 CROP.

	No. 1	No. 2	No. 3	No. 4	Re-
Hard	N.	N.	N.	N.	jected.
No. Samples	22	61	18	1	
Maximum	14.2	15.0	16.8	12.6	b17.3
Minimum	10.9	10.2	11.7	12.6	None
Average	12.6	12.6	14.4	12.6	15.1

1911 CROP.

	No. 1	No. 2	No. 3	No. 4	Re-
Hard	N.	N.	N.	N.	jected.
No. Samples	6	11	9	6	
Maximum	13.7	14.4	13.8	13.7	13.2
Minimum	11.7	12.6	11.7	13.1	13.2
Average	12.8	14.2	12.7	13.4	13.2

b—Wheat that had been stored in elevators and spoiled on account of being wet when binned.

The results of tests with hard red winter wheats may also be of interest. In this type of wheat we find about the same variations; the moisture running a trifle lower on the average than in the hard red spring type. But the variation in the amount of moisture being so great and running about on a par through all the higher grades makes this factor useless in determining grades.

PER CENT OF MOISTURE CONTENT OF HARD RED WINTER WHEAT BY GRADES—CROP 1908.

	No. 1	No. 2	No. 3	No. 4	Re-
	No. 1	No. 2	No. 3	No. 4	jected.
No. Samples	7*	13	5	5	12
Maximum	12.8	13.8	12.8	....	13.7
Minimum	10.0	11.5	11.8	None	13.2
Average	11.5	12.7	12.4	....	13.4

1909 CROP.

	No. 1	No. 2	No. 3	No. 4	Re-
	No. 1	No. 2	No. 3	No. 4	jected.
No. Samples	19	10	5	5	4
Maximum	14.2	14.8	14.0	13.5	13.2
Minimum	9.6	11.0	11.4	13.0	12.3
Average	11.7	12.3	13.1	13.2	12.5

1910 CROP.

	No. 1	No. 2	No. 3	No. 4	Re-
	No. 1	No. 2	No. 3	No. 4	jected.
No. samples	21	9	....	....	....
Maximum	13.1	12.8	....	....	....
Minimum	9.5	11.2	a13.4	b13.7	c13.0
Average	11.3	12.0	....	....	....

1911 CROP.

	No. 1	No. 2	No. 3	No. 4	Re-
	No. 1	No. 2	No. 3	No. 4	jected.
No. samples	13	6	5	....	....
Maximum	12.6	12.9	13.2	....	....
Minimum	10.2	11.0	11.5	d13.3	....
Average	11.3	12.1	12.4	....	....

a, b, c, d, equals one sample only.

*Number of samples in average.

IN THE INLAND EMPIRE.

That fruitful section of our country, the "Inland Empire," as its residents proudly call it—that great central valley which includes western Idaho and eastern Washington and Oregon, lying between the continental divide of the Rockies and the great coastal Cascade Range—has already come to be a great grain producer; but until recently there had been but few grain elevators. A shed, a platform for storing wheat in sacks, a pushing of new grain to market in a hurry after harvest, was the original program as the crops; but as the farms have taken on the feature of veritable homesteads instead of ranches for temporary land exploitation, the grain



ELEVATOR AT RATHDRUM, IDAHO.

elevator has come with its usual benefits to the rancher by making for him an open cash market at all seasons of the year, whether or not exporters' agents from the Coast are on hand to buy when he wants to sell his grain.

Several houses of this kind have been described in these columns. The illustration herewith shows another, located at the comparatively new town of Rathdrum in the great and rich county of north-west Idaho, Kootenai. It is owned by the Rathdrum Grain and Supply Co., Ltd. (Inc.), of which Wm. Neustel is president, G. A. Laird, vice-president and M. B. Layton secretary-treasurer. The elevator is 40 feet square and will hold 12,000 bushels of loose grain; while the warehouse is 40x80 feet in size and has capacity for 30,000 bushels of sacked grain as well as 20 tons of hay. Besides these there is a flour storage for 100 barrels. There is thus provided a local reservoir for loose as well as sacked grain, that must be a convenience to the local farmer, while the stocks of flour and feeds, for both beasts and poultry, and building materials bring these commodities to the door of all in quantities to suit immediate needs and contribute in that way to the upbuilding of both the diversified farming and the homes of the neighborhood.

The present owners of the property, for several years previous to their acquisition of it, had charge for their predecessors, and are well liked by the clientele of the business, which has always been prosperous and never has failed to pay respectable dividends.

Baltimore received its first carload of new white corn from Indiana on October 31. It was in fine condition and graded contract.

[For the "American Elevator and Grain Trade."]

TAKING ADVANTAGE OF THE LEGEND.

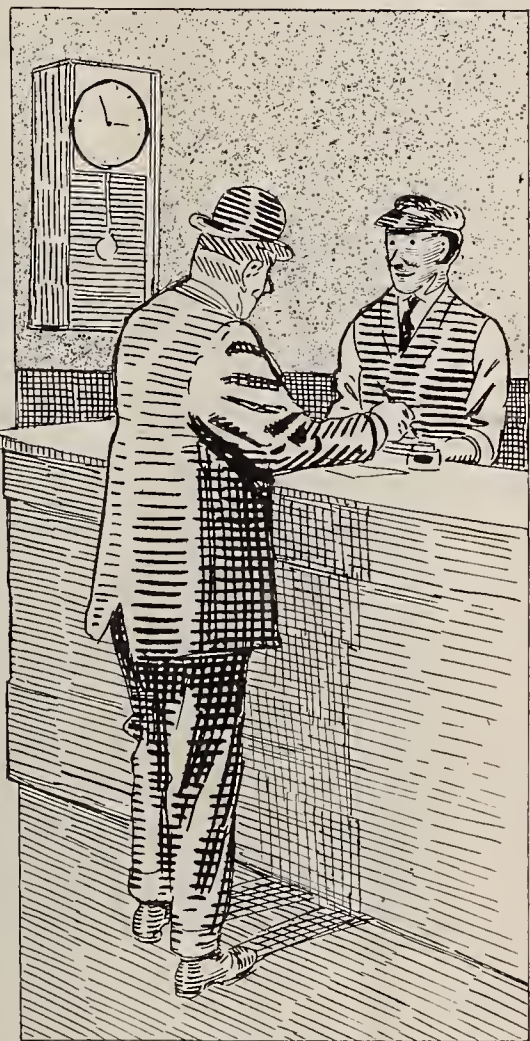
BY GUIDO D. JANES.

When Asa Shodd bought out the defunct Farmers' Elevator Company early last fall, he found the place full of no grade wheat. This did not disturb him, however, or cause him to feel blue.

"I bought the elevator on a gamble," he remarked to his wife. "Though they say you can't gamble except in a bucket shop, if I don't win out on the deal I will eat my hat. Just see if we do not feast on turkey and cranberry sauce next Thanksgiving."

Mrs. Shodd was a skeptic, being a direct descendant of Thomas Paine.

"You'll get stuck," she said, not in a jesting manner. "And will be poorer than No. 3. I have taken



"WIRING WORDS TO MRS. SHEDD."

a seal record of your mental car, and found you to be a pill."

"Please don't deal out sarcasm in that manner," returned the good natured Asa; "wait till you see the finish. Meanwhile give me a kiss."

"Now, I will tell you more of my scheme," he added, wiping off his lips. "You know I used to be switch tender at Novinger Junction. There is a legend told there that every Saturday before Thanksgiving a turkey comes out of the scrub oak and prairie grass and by turning a switch wrecks a train."

"That's tommy-rot."

"I thought so myself until I investigated; and sure enough it was only too true. For the past six years there has been an annual wreck at Novinger at that specified time. Hank Stores told me that when he started to fire on the Missouri Division, seven years ago, his train ran into a poultry train at the yard limits and killed every blooming turkey aboard. That started the trouble, and out of revenge ever since those turkeys come back with their devilment."

"Well, how will that benefit you?"

"I can't tell you now, because you will laugh and then tell my plans to that general claim agent at Chicago. No, wife, I can't trust you since you flirted with him at the grain dealers' convention last summer."

"Well, don't. I am going to make a visit to Trenton to see mother. I will be back Thanksgiving. So long."

Mrs. Shodd then withdrew *via* the evening train for the above mentioned town, and Asa set to work to put the turkey legend to practical use. He purchased a quantity of no grade grain, paying little or nothing for it, until he had his 28x58 elevator jammed full of the stuff. It smelled so musty and vile that Asa had to wear a clothespin upon the bridge of his nose all the time. Yes, he had to have it there, and kept it in that location until a week before Thanksgiving. Then he removed it and asked the railroad agent for thirty grain cars.

"Good gracious," remarked the agent, when the application for the cars was made, "are you going to move the town away?"

"No, I am making a small shipment of grain to Chicago. I want it to leave here Saturday night and get into Novinger by midnight."

"All right, Mr. Shodd; I will have them here."

So the cars were forthcoming, after which they were filled with the off grade grain. This being done, Asa said he was glad, and then asked Murphy, the house foreman, to take a little drive in the buggy with him down to Novinger Junction.

"Why do you want to go there?" inquired the foreman. "Nothing doing there tonight. 'Tracy, the Outlaw,' don't come at the opera house until Monday."

"I know, but I just want to see if that turkey legend will come off as per schedule."

A sudden light shot into Murphy's face.

"I see," he laughed. "I thought you were foolish, but I see now that I have been the foolish one. All summer I have black balled you in my mind, and wondered if your brains wouldn't work better if sent through a scourer. You are astute. Sure I will go with you. I wondered why you wanted to get that train load of grain into Novinger this particular night. You are all to the good."

"Thanks; but come, let's go."

So the two piled into the buggy that was hitched to a post outside the office and were soon en route to Novinger.

They talked upon various subjects, including commerce commissions, carload minimums, and belting. It was upon this last mentioned topic that Asa was conversing when a sound like some one dropping an armful of kindling wood drifted into their ears.

Shodd laughed. Murphy chuckled.

"The annual turkey legend's taking place," announced the latter, pausing in his chuckling. "Congratulations to you, proprietor. You are a lucky chap, and honorable, too; for it is no crime to beat a railroad. When will you get damages?"

"Wait and see."

A turn in the road brought them suddenly into the electric lighted yards of Novinger, and there, as if in broad daylight, stood a mass of debris, a conglomerate mass of grain doors, off grade grain, cars, rolling stock, etc.

As the two neared the scene of the wreck, a fire broke out, and soon the wreckage was in a mass of flames, furnishing sufficient illumination without the aid of the electric lights, so these were turned off. Even in the midst of trouble the railroad was economical.

Asa and Murphy watched the scene awhile, joked about it, and even went so far as to laugh up their sleeves, and becoming weary they at length returned home, four miles away. Reaching there, Asa dropped into the telegraph office and wired a word to Mrs. Shodd to come home and prepare the Thanksgiving dinner.

"Why?" she asked.

"Because I have made good. The turkey legend has assisted us."

"O, all right, I will be there," she sent back at five cents a word.

Just as this message was received, another from Chicago wandered in over the wire. It was from the general claim agent at Chicago. It was as follows:

"Will settle your loss on thirty cars of grain wrecked at Novinger a few minutes ago on the basis of No. 2 wheat Chicago prices. I do this to apologize to you for flirting with your wife in Chicago this summer. Will mail check tomorrow."

[For the "American Elevator and Grain Trade."]

HAVE YOU A PRIVATE WATCHMAN?

BY L. C. BREED.

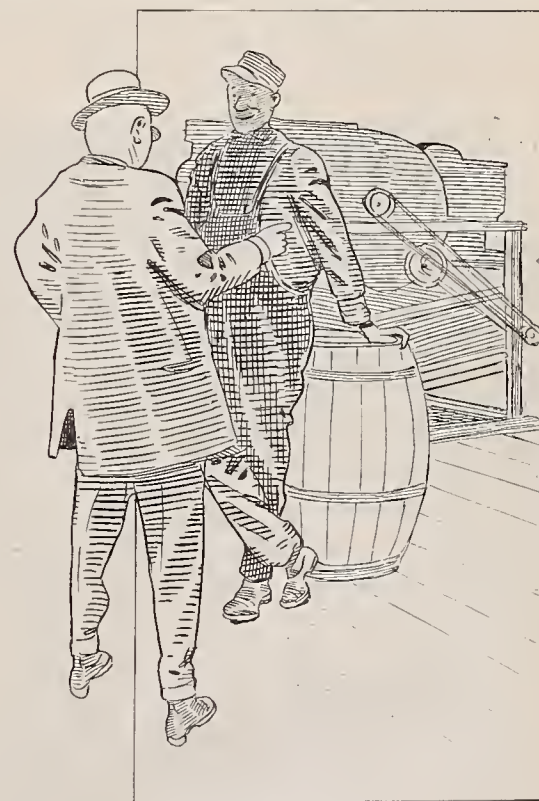
Every one who reads the papers cannot fail to be impressed by the really appalling loss which is constantly being suffered by property owners in the United States through fire. This loss, as every one knows, is far in excess of the fire loss experienced in any country in Europe. No doubt it is mainly owing to the character of the buildings, in respect of the material used and the method of construction, but in addition it is owing largely to sheer carelessness. Now, as "an ounce of prevention is worth a pound of cure," it is well to consider in what ways prevention may be applied.

Since more bad fires occur at night than in the daytime, mainly because there is no one around to put out the fire before it spreads, it is quite plain that a private watchman would come under the head of preventives, and in case of large concerns, such provision is almost invariably made, but there are thousands of smaller ones where the entire dependence is placed on the patrolman, who, as he has considerable territory to cover, cannot always discover an incipient fire. He is pretty sure to discover it only when it is well under way. Again, in many places there are no patrolmen.

If a party feels he cannot afford to stand the expense of a private watchman, then he should induce some of his neighbors to form a club with him and pro rate the cost among the number. It is likely a part of the cost could be saved in effecting insurance at a lower rate on account of cutting down the risk.

When a party stops to consider that in addition to the direct loss over and above insurance, the indirect loss through the interruption to his business, he is likely to realize that he had better economize in some other way, in order to carry out the plan suggested, if it is necessary to do so in order to protect his property and business.

A good many cases of fire arise through the falling of sparks from locomotives, consequently sheathing the exposed sides of a building with corrugated iron would reduce the risk from that source. Furthermore, no dealer in hay and feed



"A SUDDEN LIGHT."

should allow parties to smoke on the premises, and should set the example by refraining from doing so himself. Burn all greasy rags and put the match box out of reach of rats. Provide a lantern to prevent the use of other means, and have no candles or lamps on the premises. "Vigilance is the price of safety."

On October 16 the Winnipeg grain inspection records to that date were broken with 1,342 cars on 14th and 1,200 more in sight. The quality of the grain was high.

[For the "American Elevator and Grain Trade."]

ONE OF THE CORN PALACES.

THE CORN PALACE AT MITCHELL, SOUTH DAKOTA, ITS ATTRACTIVE DECORATIONS AND ITS USES.

BY FELIX J. KOCH.

What the "Ice Palace" so long was to St. Paul and Montreal in times past, the Corn Palaces have become to some of the lesser towns of the great corn belt. Each year the decorator is brought from

or less ornate borders, all made of the same material. Full ears and cross-sections of ears are also used freely, rows of yellow corn following rows of red corn, each ear cut longitudinally. Above these one counts some twenty rows of the yellow corn again, with black ears in between. There is a scroll pattern on the wall above this, and set in that are panels with figures of Egyptian type. With these the whole exterior is coated, even to the turrets, which last give to the building the familiar

one hand there is a platform, with giant curtains bearing the picture of a Western cornfield.

Down the length of the hall are set long tables, flanked on either side by immaculate black camp chairs. Half an orange, with a sprig of smilax tucked inside, and a postcard of the palace leaning against a golden globe, together with a booklet spreading Mitchell's renown, is the usual souvenir that one finds when the tables are spread to receive their guests. From your seat you hearken to some of the men who have raised the corn for this decorative purpose, tell how they did it, and over against the curtain you remark a huge horn of plenty, all of corn. Outside, belated strangers are posing one after another for snap shot artists, and later the feast is on.

It seems strangely incongruous to find the most up-to-date of luncheons served here in a rustic corn palace, but beginning with the orange cocktail in the orange baskets, there is the tenderloin of beef with mushrooms and new potatoes in parsley butter, green peas and brown and white sandwiches, along with the salad, the salted nuts and jelly, the whole winding up with ice cream, a white cake and coffee. While the mayor of Mitchell makes his remarks—a genial but withal not over-tutored man—pretty young girls from the town wait on the guests. Without, the glorious Dakota sunshine floods the palace walls, and it seems to emphasize the mayor's remarks as he relates how 'round 1890 there were several years of drought, so that folks thought this land good only for coyotes, only to find later that the long days of golden sunshine are what make now the wealth of the land. Then some few keen men with civic spirit, set out to show the world what was true of South Dakota, and so they built this palace and have proved this a land of bountiful agricultural products. That first palace was finished in 1892. The Shriners and the Commercial Travellers helped to dedicate it by making a parade, and there were exhibits of varied sorts. Thirteen times since then have exhibits been held annually in this place, every county in the state contributing; and so the Corn Palace, more than any one thing, has served to keep South Dakota on the map.

Believing, or professing to believe, that the buyers of broom corn in the Southwest have a secret



THE CORN PALACE AT MITCHELL, SOUTH DAKOTA.

the city to exhibit his skill in beautifying with materials furnished by the maize plant alone the buildings dedicated to King Corn, making them unique and as beautiful as possible for the "Harvest Home" festivities. Frequently the novelty "wears off" and the "palace" disappears, but out at Mitchell, in South Dakota, there is maintained after many years one of the largest and most noted of these corn palaces. Decorated afresh every year, the description of the building for one year would be sadly amiss for the next. As a rule, it takes about two months to complete the work, and each

Moorish aspect. Against the background of the attractive facades of the "Corn Palace," visiting delegations from different towns and localities are photographed on arrival at Mitchell, and the unique pictures are sent all over the world in one form or another.

Nor is the Corn Palace a matter of the passing moment. It occupies the attention of the people for months in advance, and as you stand before some particularly attractive facade, you may learn how certain farmers make a point of raising certain grades of corn just for the purposes of this annual exposition of South Dakota's farm products. The first palace was put up there in 1893, and each year since then the decoration of the building has been different. That the designer receives goodly pay may be guessed when it is learned that he has as many as a hundred and fifty men at work under his direction to develop his ideas. These men begin their labors about September 1, when the corn begins to ripen, and the city pays the expense of their work; and the hall after the corn show is over serves as sort of municipal rallying-place for band concerts, vaudeville shows and the like. Of course, the corn stays until the next year, when dismantling for the new design begins. Strangely enough, too, birds don't bother it, although there should be a feast for them there, for it takes not less than fifteen hundred bushels of corn (worth, locally, a dollar the bushel) and two tons of stalks to cover the building. The price of the corn is high, but it must be remembered that certain shades and colors are raised solely for use on this one building.

This "Corn Palace" is the more imposing, perhaps, because of its surroundings. Across the street is the Elks Temple, with a pillared portico. Next to it an humble tent houses a "Flying Dutchman." Beyond, the street is broad, but lined with the usual two-story brick store buildings of South Dakota. Above all these the "Corn Palace" rears itself aloft.

Inside the palace is equally attractive. Rising from the floor are great pillars, black at the base, above which is corn of usual hue and then alternate rows of red corn and of yellow. In the center there is a rotunda, and standing well out in this one gets the full effect of the decorations round the edge of the balcony. The benches rise in tiers, while at



DETAIL OF CORN PALACE DECORATION.

day of the decorator's labor brings fresh surprises in its train.

At the present writing the style, or motif, of the decoration of the Mitchell "palace" is the Egyptian. The basic material used is cornstalks placed either in rows, laid horizontally or vertically. As will be seen by consulting the pictures, the characteristic figures are placed in panels enclosed in more



DETAIL OF CORN PALACE DECORATION.

understanding as to prices to be paid to the farmers, the latter are said to be abandoning their acreage to that crop in some parts of Oklahoma.

The sugar beet crop in Western Kansas this year is said by the sugar factory officials here to be the largest ever grown in this section of the State, and the factories will be pushed to the limit to handle the raw material.

HON. A. P. SANDLES.

In view of the coming retirement of Hon. James Wilson of Iowa as Secretary of Agriculture, an office he has held for a longer period than any predecessor, having been appointed by President McKinley in 1897, and a cabinet minister for more years than any other man in our history, the Tri-State Grain Producers' and Dealers' Association has nominated Hon. A. P. Sandles of Ohio as his successor, doing so by means of the following preamble and resolution:

Whereas, We recognize agriculture to be the foundation of commerce and a dominant factor in the social and political affairs of the United States; and

Whereas, We recognize the great importance and high requirements of the office of Secretary of the United States Department of Agriculture;

Whereas, Hon. A. P. Sandles has served the great state of Ohio in a highly efficient manner for four years past as Secretary of the Ohio State Department of Agriculture; and

Whereas, Hon. A. P. Sandles is a broad, progressive and highly capable executive and business man of sterling character, be it

Resolved, That we, the members of the Tri-State Grain Producers' and Dealers' Association of North-



HON. A. P. SANDLES.

western Ohio, Northeastern Indiana and Southeastern Michigan, in regular convention assembled, in Lima, Ohio, this 8th day of November, 1912, endorse Hon. A. P. Sandles for the position of Secretary of the United States Department of Agriculture and earnestly petition his appointment by the President-elect, Woodrow Wilson.

The above resolution was introduced by John A. Wright of Liberty Center, Ohio, and seconded by J. W. McCord of Columbus, Ohio. It was adopted by a unanimous vote.

A NEW DISCRIMINATION.

A Washington special of recent date says that a complaint against elevator privileges has been filed with the Interstate Commerce Commission by the Grain Exchange of Omaha, in which it is said that grain dealers at Omaha have constructed and operate



POLITICS WILL BE CUT OUT FOR A WHILE.

—Zahm's Red Letter.

privately elevators for handling grain costing many hundred thousands of dollars, including the Omaha Elevator Co., Updike Grain Co., Trans-Mississippi Grain Co., Cavers Elevator Co., Nebraska-Iowa Grain Co., Merriam & Millard Co., Holquist Elevator Co., Crowell Elevator Co., Union Grain & Elevator Co. and others at Omaha, and that none of these elevators is owned or operated by the railroads; whereas at Kansas City the railroads have built and leased elevators at low rentals to grain dealers there, which action is said to constitute a discrimination in favor of the Kansas City dealers.

The grain elevators built at Kansas City by the railroads include those used by the Santa Fe Elevator Co., Kansas City Southern Elevator Co., Kansas-Missouri Elevator Co., Chicago Great Western, the Frisco Elevator and others.

The Atchison, Topeka & Santa Fe and other railroads were named defendants to the complaint.

[Special Report.]

TRI-STATE GRAIN DEALERS AT LIMA.

An open grain trade conference was held by the Tri-State Grain Producers' and Shippers' Association at Lima, O., on Oct. 8, attended by about 125 shippers from northwestern Ohio, northeastern Indiana and southeastern Michigan. Coming just before the movement of the new corn crop, the meeting was one of the largest and most spirited held in this territory.

At a short morning session the time was devoted principally to a discussion of the conditions to be met in handling new corn. The general expression was that, while the quality is unsurpassable, the corn is not drying out as rapidly as was expected. Consequently it will be hazardous for shippers to fill many of the sales that have been made for early shipment. A good, hard freeze would do a world of good for the corn at this time.

A. P. Sandles, secretary of the Ohio State Board of Agriculture, who is booster-in-chief of the agricultural interests of the State, was unanimously endorsed by the meeting for the office of Secretary of the Department of Agriculture in Woodrow Wilson's cabinet. John A. Wright of Liberty Center introduced the resolution, printed in the adjoining column, which was adopted unanimously.

GUESS PERCENTAGE OF MOISTURE.

During the noon recess a contest was conducted in which the dealers expressed their judgment as to the percentage of moisture contained in five samples of corn that were exhibited. After each dealer had passed his judgment and recorded it, the samples were put to actual test by Mr. Russell of the U. S. Agricultural Experiment Laboratory at Decatur, Ill. When the result of the contest was announced in the evening, it was S. L. Rice of Metamora, O., whose judgment was most accurate. As winner of the contest, Mr. Rice was presented with a Two-Compartment Brown-Duvel Moisture Tester, value \$55. Mr. Rice's estimates of the moisture content in each sample were as follows: 18%, 19%, 20%, 22% and 24%. The actual tests showed the samples to contain, respectively, 19.2%, 20%, 19.5%, 22.8% and 23.2%.

This contest created intense interest and a great many dealers were convinced of the value of the moisture tester. As C. W. Pierce of Van Wert said, it is a money maker because it gives accurate results every time. He said that last year he had corn sold in Buffalo to grade No. 4. After having loaded the car, he took an average sample which upon test showed the moisture content to be low enough to grade No. 3. He applied that car on a sale of No. 3 corn and loaded another car to apply on his sale of No. 4 corn. This one case almost paid the cost of the moisture tester.

AFTERNOON SESSION.

President S. L. Rice called the meeting to order at 1:30 p. m. and announced the subject, "Why All Grain Should Be Bought Upon a Clean Basis."

B. B. Bristol of Wharton: We must pay a high price for the farmer's grain, or the other dealer will get it, even though the farmer has to haul it to the next station. I believe in buying the good grain

at a high price and letting the other dealer have the poor grain if he wants it. I buy on the dockage system.

W. E. Gest of Defiance: I believe in cleaning grain properly. There is not a grain dealer here who is not in accord with this proposition, but it can be better worked out in our local meetings.

E. G. Odenweller of Ottoville introduced the following resolution, which was seconded by Chas. Behymer of Rockford:

Whereas, Grain bought in the rough under prevailing conditions averages a cleaning shrinkage about as follows: Oats $1\frac{1}{4}$ pounds per bushel, corn $1\frac{1}{2}$ pounds per bushel and wheat 2 pounds per bushel; and

Whereas, The enormity and significance of this cleaning shrinkage is not generally comprehended and appreciated by the farmer who sells the grain; and

Whereas, This is a day of minimized margins and close calculations, when success depends on the elimination of waste, and every fraction of a cent is made to count; and

Whereas, It is impractical to accurately estimate the proper dockage, and an attempt to estimate dockage results in a conflict of views between seller and buyer, and between competitive buyers, which tends to force demoralizing concessions that defeat the purpose; and

Whereas, The practice of buying grain in the rough places a premium upon dirt and carelessness and a penalty upon care and quality; and

Whereas, So long as country millers and elevator operators continue to buy grain in the rough, regardless of the per cent of dirt, so long will the farmers accept careless threshing and continue to deliver dirty grain; therefore, be it

Resolved, That it is the consensus of opinion and recommendation of this Tri-State Grain Trade Conference that all grain should be bought on a cleaned basis, and that all millers and elevator operators, at the earliest date possible, should equip themselves to buy all grain on a cleaned basis, either by the plan of weighing up the grain after cleaning or by weighing up the cleanings after the load.

The resolution was adopted.

J. W. McCord, secretary of the Ohio Grain Dealers' Association, spoke on "Car Shortage." He said that the situation looks very bad indeed, and that, of course, shippers can not get cars when they are not in existence. Shippers will probably be very greatly handicapped by car shortage for 120 days. This may be a good influence by helping to hold back the rush movement. He urged shippers to insist on their rights for an equal share of the cars at hand, and that every shipper should order his cars in writing, and should keep a copy of that order.

John A. Wright of Liberty Center gave one of his experiences, as follows: At one time three empties were set on his track. He immediately commenced to load one of them. Just then the local was about to pull the other two cars out. Mr. Wright demurred, but the railroad agent insisted on taking them out because he had not commenced to load them. He hurriedly dumped a sack of grain in each car, and they were left for him to finish loading.

J. W. McCord introduced the following resolution which was carried:

Whereas, The action of the Official Classification Committee in the promulgation of Supplement No. 8 (effective Oct. 1, 1912) to Official Classification No. 38, unconditionally fixing the minimum for wheat at 60,000 lbs., corn at 56,000 lbs., and oats at 40,000 lbs., and preventing shippers from using cars of less capacity than above indicated, although such cars are frequently available, will work great and unnecessary hardship to shippers in Central Freight Association territory; be it

Resolved, That the Tri-State Grain Producers' and Shippers' Association of Northwestern Ohio, Northeastern Indiana and Southeastern Michigan, in regular convention assembled, at Lima, Ohio, November 8, 1912, does hereby most earnestly protest against such action; and hereby directs its Secretary to use every effort before the proper authorities to secure a modification of the rule whereby cars of smaller capacity, when available, may be furnished shippers.

In the evening all visiting grain dealers were guests of the Lima grain dealers, including the Douglas Hay & Grain Co., McConnell Grain Co., Lima Grain & Seed Co., the Ward Grain Co., and Sec'y T. P. Riddle. At 7 o'clock all were seated to enjoy an elaborate menu at the Elks' Hall, after which there were many highly enjoyable toasts.

Sec'y T. P. Riddle, presiding as toastmaster, in-

roduced Hon. Walter B. Richie of Lima, whose topic was "The Other Fellow," a subject which he handled in a most pleasing and able manner, both seriously and humorously.

John A. Wright of Liberty Center was introduced to speak on "The Parable of the Grain Dealer," but he had talked so much during the day about practical methods in the grain business that he chose to wander from his subject. Influenced by the results of the recent election, his fond anticipations are expressed somewhat in the following fashion, which is offered as a "Bill of Sale":

REPUBLICAN JUNK FOR SALE.

NOTICE OF PUBLIC AUCTION, MARCH 5, 1913.

Our lease with Uncle Sam having practically expired and having decided to retire to private life, we, the undersigned, will offer for sale, at our residence, National Capitol, Washington, D. C., March 5, 1913, all the following described property, to-wit:

(a) One Elephant, about 40 years old; has the foot rot.

(b) One Set of Injunctions and High Cost of Living, old enough to wean; sired by Goldbugs and damned by everybody.

(c) One Republican Platform, as good as new; has been used only for campaign purposes. In this platform a large number of planks from the Democratic Platform have been inserted, but as they cannot be distinguished they will go with the lot.

(d) One Big Stick, somewhat worn from overuse.

(e) One Republican Machine, somewhat out of repair.

(f) One Financial System, well supplied with Clearing House Certificates and very little cash.

(g) A Large Quantity of G. O. P. Bric-a-Brac, consisting of old dinner pails, grandpa hats, coon skins, Teddy bears, Taft smiles, and other things too numerous to mention.

This sale will positively take place on the above day and date, regardless of weather, and everything will be closed out on that date.

N. B.—Roast Crow will be served by the Old Boys' Republican Club. Everybody, regardless of past political servitude, invited. This stuff must be cleared away.

Terms—Cash before removing property.

JOE CANNON, Auctioneer.

COL. ROCKEFELLER,

J. P. MORGAN,

Managers.

TEDDY ROOSEVELT, Clerk.

Other speakers of the evening were A. T. Ward, Lima; Col. E. L. Southworth, Toledo; E. E. McConnell, Lima; D. W. Galehouse of Wooster, secretary of the Ohio State Corn Improvement Society; J. W. McCord, Columbus.

One of the most pleasing features of the evening session was a series of vocal selections rendered by Miss Marguerite Zender of Lima, who also presided at the piano during the evening, playing accompaniments for her own and the ensemble song numbers of the program.

The meeting was one of the most successful that has ever been held by the grain men of this territory. Upon motion of G. W. McMillen of Van Wert a vote of thanks was accorded the hosts of the evening.

THE DANGEROUS DUST

The handling of grain and its products is not ordinarily considered one of the "dangerous trades," although the disease known as "miller's asthma" was prevalent among mill workers prior to the introduction of modern dust-collecting equipment. Today the average mill is so nearly dust-free that there is very little danger to those employed in mill proper, but unfortunately this is not true of the grain handling end of the business.

At the convention of operative millers in Louisville last June Chas. T. Ballard called attention to the disagreeable and dangerous nature of the work of unloading grain from cars and the difficulty of obtaining men to do this work for any length of time. Not only is the labor distasteful but it also affects the health of the workers and strong men are reduced to physical wrecks after a year or so of employment in unloading grain.

Apparently the disease is the same as that which attacks men employed to "trim" grain in the holds of vessels. Few grain trimmers are able to work day after day because of the "grain disease," as it is called.

Perpetual perspiration and numbness in the head are its worst features when first noticed. Gradually

the head takes to swelling, a drowsiness that is deceiving, as sleep for the victim is never natural or of long duration, is the one lasting effect of the disease once it enters the system. The whole body takes on a yellow hue, the face becoming bleached to a corpse like pallor, and the sufferer has the look of a man suffering from one of the strange internal diseases of the tropics.

THE FERTILIZER RESOURCES OF THE UNITED STATES.

While the United States possesses the largest phosphate fields in the world, all of the potash required for our fertilizers is imported from Germany, the annual importation being worth about \$15,000,000. Germany has, however, shown a questionable disposition to limit the amount sent to this country; and as the use of fertilizers is increasing rapidly, the need for a home supply of potash becomes every year more apparent. The Secretary's recent Report shows that the Department of Agriculture has been successful in its search, and that this country should shortly be able not only to supply its own needs of potash salts but even, perhaps, to export. A few difficulties of an engineering nature are still to be overcome, but they are not of a serious nature. A new industry will thus be established; and if the by-products are wisely used, many millions per annum should be added to the wealth of this country.

The Department's experts have covered a wide range in their investigation. Some of the desert basins were examined; brines and the mother liquors from salt wells were tested; and experiments have been carried on with the object of extracting potash from silicate rocks and minerals, such as alunite, which contain it. This work is still under way and potash in limited amounts undoubtedly will be derived from some of these sources. Up to the present none of them have given promise of satisfying the country's needs.

But in the giant kelps of the Pacific Coast a satisfactory source of potash has been found. The kelp grows along less than one-fourth of the coast line have been mapped, and yet these should yield from two to three times as much potash as the present importations amount to. These sea weeds are able to extract by selective absorption the potash salts from the sea water and on drying the weeds the salts are very largely exuded on the surface. The dried plants contain from 25 to 35 per cent of their weight of potassium chloride and the latter can very readily be extracted. The kelps contain iodine also, and many other by-products can be obtained from them. It is possible that these by-products will more than pay the manufacturing expenses, leaving the potassium chloride free from cost.

Some of the Pacific kelp groves are five miles long and two miles wide, and the growth in these groves is exceedingly dense. The two principal species that would be available are *Nereocystis luet keana* in the north and *Macrocystis pyrifera* in the south. Both these plants reach a length of 100 feet or more and grow in strong tideways or where they are exposed to the full force of the open sea. All of the groves are within the three mile limit and should be easily harvested. The heaviest groves are south of Point Sur but large ones extend as far north as Seattle. If properly harvested and protected, these groves will yield an annual harvest indefinitely; it is even possible that in the case of *Macrocystis* two such harvests may be obtained annually. On a conservative basis upwards of a million tons of potassium chloride, worth nearly \$40,000,000, should be obtained each year. No estimate can be given at the present time of the value of the by-products.

The champion corn grower of the year seems to be Ben. Owens of Ware's P. O., Elmore Co., Ala., who claims 237 3/4 bushels on one acre heavily fertilized.

J. H. Dole & Company received the first car of new No. 3 yellow corn received in Chicago this year on Nov. 1. The grain came from Illinois and sold at 56c per bushel.

BARLEY and MALT

The barley crop in the Minnedosa district of Manitoba, Can., suffered from a severe wind storm in September and the yield will average but 27 bushels to the acre, approximately.

A cargo of 7,200 tons of barley was shipped aboard the British steamer Strathroy from Port Costa, Cal., recently for use in the United Kingdom. The steamer Frankmount sailed from the same port with 4,000 tons for Liverpool.

H. I. Border threshed 70 bushels of barley to the acre from a field of 60 acres on his ranch near Bozeman, Mont. The field had not been irrigated, while an adjoining field which was under irrigation yielded but 66 bushels to the acre, it is said.

Referring to the barley crop of the Northwest Pacific Coast, the Portland Commercial Review says: "Rains during harvest cut down the yields and quality, and very little of the crop harvested can be called brewing. Over three-fourths of the crop will be feed. The crops of barley are estimated as follows: Oregon, 3,450,000 bushels; Washington, 6,000,000 bushels, and Idaho, 3,375,000 bushels, together making 12,825,000 bushels."

FOREIGN BARLEY CONDITIONS.

The U. S. imported for the fiscal year ended June 30, 1912, 2,768,474 bushels of barley and exported 1,585,242 bushels. The imports for the current year are likely to be less and the exports greater.

In reply to an inquiry several U. S. consuls have made reports on current conditions of barley abroad, from which it is learned that the yield this year will fall short of demands and that the supply from Tunis and Algeria is also very short. In Italy there is a yield of about 2,450,000 bushels less than in 1911. In Germany the yield is not much below 1911, but owing to the weather at harvest the quality of the barley is low in vitality and color, and prices for good malting are very high, the local supply of that grain being very low.

[Special Report.]

CHICAGO BARLEY MARKET.

BY A. L. SOMERS,

President Somers, Jones & Co.

The barley market since our last letter has settled down to a slightly lower level of values, especially so for the medium and low malting and the feed grades. Good to choice qualities of barley remain relatively scarce and have held values better.

The market at this writing, November 12, ranges 52 to 74c for malting kinds, with sales largely at from 55 to 68c. For strictly feed qualities 48 to 51c is quotable. The export demand during the past two weeks has become light and appears to be diminishing. Around 50c c. i. f. Buffalo for 46-lb. barley is still obtainable. The extreme ocean freight rates and the scarcity of ocean tonnage, most of which has been taken up until spring, is against further export business for the present.

The local receipts show an increasing percentage of black oats mixed barley, coming largely from the western Minnesota-Dakota territory. An alarming increase, however, is noticeable from the territory farther east, the arrivals showing black oats mixtures as far east as western Wisconsin. This fact is to be greatly deplored, as it indicates plainly that too much poor farming is indulged in in the Northwest. Much of the barley arriving here shows such a heavy admixture of black oats that the otherwise good barley loses not less than 10c per bushel in the price. There is little doubt that the heavy admixture of black oats in the barley, and in the wheat as well, of the Northwest, results directly in losses of hundreds of thousands, possibly millions, of dollars to the Northwestern grower.

Northwestern milling and elevator concerns clean the barley and the wheat and are offering so-called mill oats, the wild or black oats cleaned out of the other grain, in 25,000-bushel lots. The percentage of foul grain in the barley and in the wheat has apparently never been so large as this season. Proper rotation in crops and the use of pure seed would no doubt go far toward improving the situation.

Barley values, as far as good qualities are concerned, are probably about right. Local maltsters seem ready to take the arrivals at about current prices, except for the wild oats mixed varieties. Latter, unless the export demand comes to the rescue soon, are likely to sell still lower.

A NOVEL ENTERPRISE.

The picture herewith has more than passing interest and importance for two reasons: first, it represents a practical plan for economically saving and utilizing a large fractional part of the tremendous waste of urban housekeeping; and, second, it is, therefore, a successful application of the principles of conservation to the solution of the problem of the cost of living by turning a waste into food-producing materials.

As every town dweller knows, the disposal of urban garbage is one of the momentous problems of municipal administration, from the point of view of good health, urban cleanliness of appearance, and cost of disposal. Most cities have adopted the cheapest and easiest method—destruction, disposal in the quickest and simplest way, like that of the sewage also, in spite of the obvious fact that the science of conservation will one day condemn as wasteful in the extreme the destruction of both these valuable elements of refertilization of the lands to which both the garbage and the sewage should be returned. But at Grand Rapids, Mich., a different system is employed; there the daily 50 to 70 tons of garbage left by the 120,000 people

is one that will appeal to the reader. Upon this point the owner, Mr. Alvah Brown, has this to say in a recent address to the American Public Health Association on "The Disposal of Municipal Garbage":

This farm has been established less than six years; and previous to that time industries of this character had been of a very hazardous nature, because of the great risk of loss of stock through the ravages of hog cholera. Since the Government's process of hyper-immunization has been perfected, this disease can be controlled with slight losses, if the rules are systematically followed. Cleanliness is essential from a sanitary standpoint, but the lack of it has apparently no effect to increase the prevalence of cholera in event that the stock has once been made immune. The pigs are treated at the age of from four to ten weeks, and while nursing. A pig is held in position by one man and by use of the hypodermic syringe the virus is injected into the left ham, which furnishes the disease germ. Serum is then injected into the right ham, which furnishes the combative qualities in the pig's system. This is known as "the simultaneous treatment," and is not always practical because of the danger in handling the virus on the part of the operator. My losses in pigs from this treatment, in the summer months, will not average above five per cent; but in the other months, which are not so favorable to the pigs, the losses are considerably greater, the per cent depending on the weather conditions.

I treat pigs at this age because of the lesser amount of material required, as this is regulated by the avoirdupois of the animal. All out stock must

FIRE PREVENTION DON'T'S.

The Building and Sanitary Inspection Company of New York has promulgated a collection of "fire prevention don'ts," of which the following are applicable to mills and elevators:

Don't have steam pipes in contact with woodwork or near inflammable materials, and don't permit rubbish to accumulate behind radiators or steam coils.

Don't destroy the insulation on flexible electric light or fan cords by hanging them on hooks or nails.

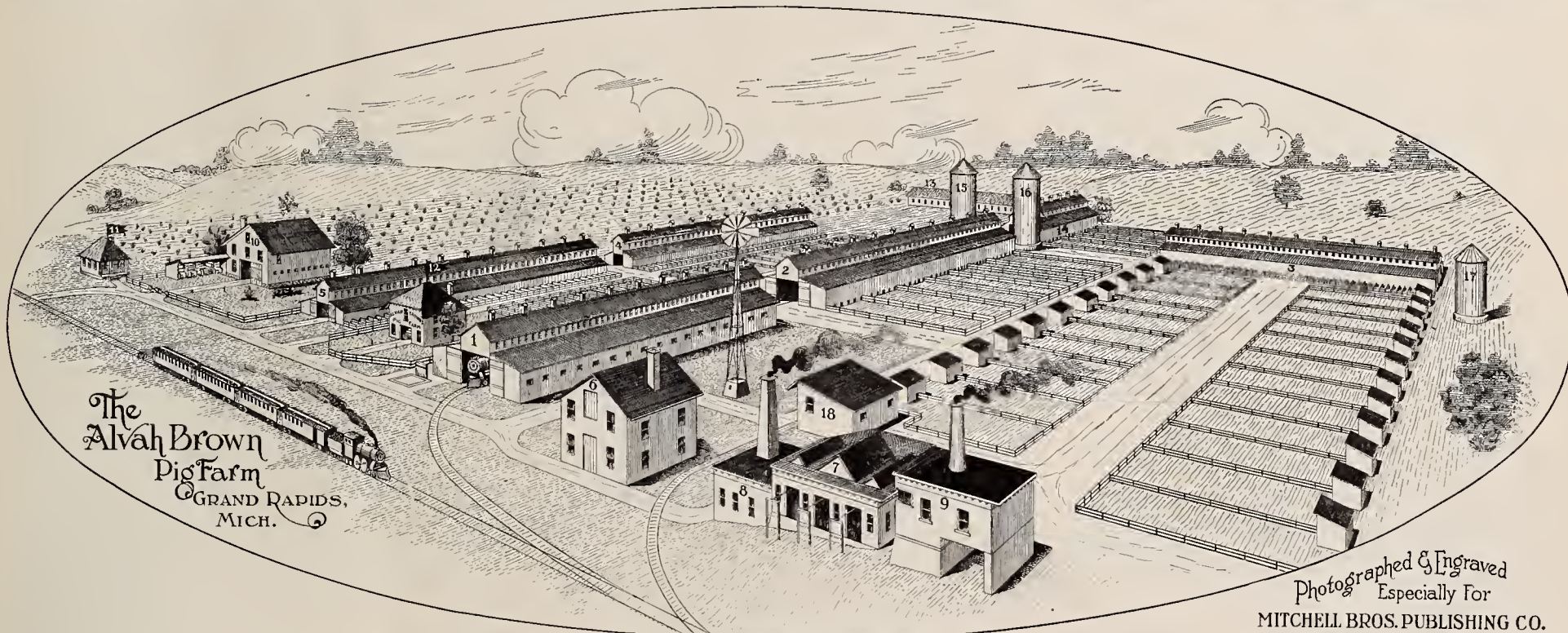
Don't throw away lighted cigars, cigarettes, or matches.

Don't permit your employes to smoke. Don't permit any one to smoke in a garage, or if combustible materials are kept on the premises.

Don't throw oily waste or rags on the floor; keep them in approved self-closing cans during the day and at night remove from the building; they are self-igniting.

Don't use sawdust on floors or in spittoons, or to catch oil drippings from machines or gearing. Sand is safe.

Don't keep matches loose in paper boxes, but only



of the city are utilized; and the plant shown in the picture is where the utilization takes place.

As the legend on the left of the picture declares, it is a pig farm, to which the garbage collected in the city by the employes of the owner is brought in cars built for that purpose, one or two per day according to the amount of daily collections. These cars are switched into the farm and there moved into the great feeding sheds 1 and 2, divided into separating compartments for stock of different ages, where the garbage is thrown upon concrete platforms where it is fed. Buildings marked 3, 4 and 5 are for farrowing, with 120 compartments, each of which is 6x12 feet and has a yard 6x16 feet adjoining, where but little garbage is fed. The other buildings seen on the farm plan are water-tank, houses sheltering great boiling tanks for cooking garbage, silos, barns, grain storages, offices, etc., all arranged and constructed in a manner to accommodate a large population of swine of all ages in such manner that birth, growth and fattening are going on continuously under the most sanitary conditions. The details are too complicated for explanation here; but the facts are that the garbage of Grand Rapids is here converted into vast quantities of pork under the most wholesome conditions—a great municipal waste is stopped and food created as a result, the garbage being of course supplemented by large quantities of fresh feed and grain grown on lands of the owner surrounding the piggery or purchased elsewhere if necessary, as all fat hogs are finished on corn and millfeeds.

Naturally the question of the health of the stock

be immune, otherwise the animals are quite sure to contract the disease early in life. If any animals are to die through vaccination or through the disease, we want it to happen while they are young and before any investment of consequence in their development has been incurred. My experience indicates that treatment by this process makes the animal immune during its natural life, which does not often exceed four or five years and is generally much less. My pigs being immune, sire and dam are less susceptible to the disease if not vaccinated and less liable to death through the vaccinating process. It has been estimated that pigs from stock where immunity extends back several years on both sides have about 40 per cent of immunity even though no treatment is given, and I believe this is a fair estimate.

A large part of my sales are of pigs and mature breeding stock that go to garbage disposal plants and to the farmers living where cholera has prevailed to an alarming extent. I have furnished foundation stock to a number of garbage disposal industries, not only because I am able to provide cholera immune animals, but because it is necessary that such plants be stocked with swine that have been accustomed to the character of food to be provided. If a garbage plant is stocked with farmers' corn-and grass-fed hogs, there will be a greater loss by death than if they are wholly raised on garbage feed. I know this to be true from the statements of others, and I have had expensive experience along the same lines, and before I could establish a successful herd I found it necessary to buy this very class of animals.

Another loss is often met in enterprises of this character through the establishment of unsuitable feeding and sleeping quarters for the stock and the lack of the right kind of soil. Our buildings are well constructed and permanent, which makes the business not only more profitable but gives greater satisfaction in the conduct of the business. At this writing I have 5,860 swine at my plant and they are confined on about twenty acres of land. My herd sometimes runs above six thousand, but for the winter I aim to reduce the number to about four thousand.

We do no slaughtering at the farm but have facilities for loading stock, bones, grease and fertilizer in carload lots.

in metal or earthen safes. Those lighting on the box are safest.

Don't permit benzine, gasoline or explosives on your premises unless used from approved safety cans.

Don't fail to have fire pails filled, distributed and placed in conformity to rules of local boards of fire underwriters.

Don't fail to test periodically your hose and fire appliances.

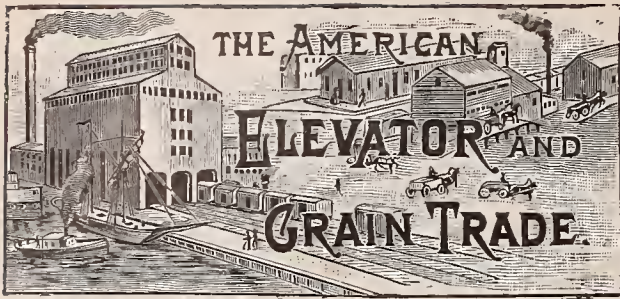
Don't fail to close at night all doors and traps to elevators, hoistways, stairs and communications, as well as iron shutters.

Don't forget that neglect and carelessness are the cause of more fires than all other things.

SPLIT PEA DUTY.

Germany on October 18 asked our Treasury Department to suspend temporarily the levy the countervailing duty placed on importations of German split peas. This penalty had been ordered in view of the fact that the German split peas are exported on import duty rebate certificates which this Government insists are so calculated that the rebate amounts to a substantial export bounty on the exported split peas, greatly to the damage of the same industry in Michigan and the Central West. On representations of the German Ambassador, Count Von Bernstorff, the treasury agreed to postpone the operation of the extra duty until November 20.

Since the election, the "small-fry" newspapers of Germany have expressed the expectation that the country will abandon the policy of "pin-pricks" such as the above, which among the Germans; but they may be quite disappointed in this.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon applications.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, NOVEMBER 15, 1912.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.,

American Elevator & Grain Trade, published monthly at Chicago, Ill., required by the Act of August 24, 1912.

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A. J. MITCHELL,

(Signature of editor, publisher, business manager, or owner.)

Sworn to and subscribed before me this 1st day of October, 1912.
(Seal.)

PETER L. EVANS,
Notary Public.

(My commission expires Sept. 19, 1915.)

SECRETARY OF AGRICULTURE.

The Ohio State and Tri-State associations, composed of grain dealers in Ohio and parts of Indiana and Michigan, have taken the initiative in calling the attention of Mr. Wilson to Hon. A. P. Sandles, now secretary of the State Board of Agriculture of Ohio, as an available and desirable man to succeed Hon. James Wilson in the Department of Agriculture.

It would, indeed, be hard to find a man who combines more of the qualifications of mind and temperament with technical knowledge, executive ability and enthusiasm for the cause of the

"new agriculture" than Mr. Sandles. His record in Ohio is one of great accomplishment, and he is distinctly one of the small number of truly great agriculturists in this country.

Without inviting controversial discussion, there can be no hesitation in saying that while Mr. Sandles' appointment would be a fitting one in every respect, the appointment of the only other person thus far named as a possible rival, Dr. H. W. Wiley, would be little short of a disaster to the Department and to the country.

THREE BILLIONS OF CORN.

What would the late Gov. Oglesby think were he to return to earth to repeat his famous apostrophe to the corn to find today a crop of 3,200 million bushels of the golden grain—a sum that in his day had hardly been dreamed of as within the possible production of even this greatest of all corn producers of the world. More,—what would he have thought then had he been told that it would so soon after his time be within the power of the Nation to consume the greater part of so vast a crop on its own soil and still hold the price above 50 cents?

Men speak of the wealth added by this vast crop to the assets of the Nation, but do not stop to think that within a year, perhaps, hardly a kernel of this vast ocean of grain will be in existence, save only as it is represented by the permanent work of men's hands—the imperishable things that the energy stored in the perishable corn enables the men who eat it in one form or another to create. Does the fault-finding farmer who thinks he is the only producer of wealth and to whom no social or political or commercial condition is ever quite as it should be, stop to think how nearly worthless except to feed himself and his kine, his 3,200 million bushels of corn would be were there no town-folk to give him useful and luxurious commodities in exchange for it; and that but for the grain dealer and the grain exchanges the waste of his substance that would take place in making the exchange of his grain for the goods he needs and desires would be so large as to greatly reduce his income? Men like Mr. Wallbaum and the soreheads of the Equity Society type ought to think on these things before rushing into public arenas to damn a system they evidently do not understand and to do battle to destroy so manifest a benefit to producers and consumers alike.

EFFECT OF THE ELECTION.

It is very hard for some people to lose, or to be disappointed in their expectations or desires of the outcome of a spirited national election; and there was before the election, as there has been since, some rather questionable newspaper talk of panic, dullness, and that sort of thing, as the result of Gov. Wilson's election, which truly patriotic and sober minded people should never permit themselves to indulge in at such a juncture. To all such people one is justified in answering with contempt, as Job did Zophar the Naamathite, "No doubt but ye are the people, and wisdom shall die with you."

It is pleasant under such circumstances to see a man like L. F. Gates of Lamson Bros. & Co., a man of large affairs in the grain trade, taking the obvious position of refusal to borrow

trouble or of anticipating any alteration in the functions of the exchanges. "Unless we are very much mistaken in the character of the men who are to be the leaders of the new administration," he said on the 7th, "no move to disturb the present methods of handling our immense grain crops will be hastily taken, nor is any move likely to be made without careful investigation of the whole matter."

Mr. Gates anticipates a bill that will destroy the bucket-shop and that, certainly, would be a "consummation devoutly to be wished." Further than that, we believe, as apparently Mr. Gates believes, that Gov. Wilson is sufficiently advised of the functions of public exchanges to appreciate what a crushing blow it would be to the commerce and trade of the world to forbid freedom of trade on exchange floors, whether it be in the commodities bought or sold at the cotton, grain and provision exchanges, or the properties similarly marketed at the stock exchanges.

CHEAPER FARM LOANS.

Doubtless there are sections of the country where the crops might be increased in volume by means of the European system of co-operation in the creation of farm credit facilities; for farmers are manufacturers of a sort, who need more or less capital to carry on their operations, or ready money at certain seasons. But the old habit of the West and South, of having the merchants and the grain buyers carry the farmers for an indefinite period, striking a balance of an open account once a year and carrying the farmer's deficit over to open next year's account, is passing. There are, in the first place, too many farmers, and the facility with which goods are now obtained by the merchant, while it enables him to do business on smaller capital, also compels him to shorten the periods of his credit, and has created the custom of monthly settlements in very many communities. The farmer can still get credit, if his personal character and reputation justify the accommodation, but, except of the renter class, the number of actual farmers in the older states who ask for credit because they really need it is not very large. Many farmers are now money lenders and more of them are bank depositors today than ever before in our history, and they pay their bills as promptly by check as do city folks. It is true the whole number of farm mortgages was 5 per cent greater in 1910 than in 1890, but in the West the number has probably declined—in Kansas, for example, the whole number of farms under mortgage declined from 55.5 per cent in 1890 to 44.8 per cent in 1910, and the probability is that the greater volume of the borrowed money went to purchase more land than to liquidate personal debts.

Where, then, does the increase of mortgages obtain? Probably in the East and South. In the East "worn-out" farms are being recovered and redeemed; in the South the money is going into land redemptions and improvements; and both sections are in the healthiest possible condition for that very reason. For just as the West, having worked out from under its load of borrowed money, has come to the surface rich, so, too, will these borrowing land-redeemers of the East and South, in time, pay off their

loans and find themselves "well fixed." The fact that our farmers are heavy borrowers does not to us seem a sign of financial difficulty, but rather the reverse—the farmers who can borrow are borrowing, just as all the great industries of the towns are borrowers, because they can make the borrowed money earn more money for themselves. It is a very wholesome thing to be in debt if the debt is of the right sort; and American farmers are no exception to this law.

COTTON CORNER CASE.

The action of the Government against James A. Patten and others who "ran a cotton corner," as a combination in restraint of trade, is now before the Supreme Court, but it does not appear from the published summary of the Government's brief nor from the oral arguments that a very strong case has been made out. Indeed, the facts in the case seem to be badly confused and contradictory as a basis for such a procedure. True, the price of cotton was raised by the campaign, but the producers were greatly benefited by the advance; nor does it appear—in fact, the Government admitted it does not appear—that the defendants at any time withheld cotton from purchase by consumers. Nor yet does it appear that there was any restriction on competition by Messrs. Patten *et al.*, either in the buying or the selling of real cotton, their own holdings or those of others. They simply went into the market and bought cotton; and nothing would have come of their transactions in which the public could be interested, were it not that certain parties sold them cotton the sellers did not have in possession and were compelled to liquidate the damages of the default in the contracted delivery.

One fails to see how these facts conflict in any way with the currents of commerce and trade, or with free competition among buyers and sellers of cotton, or how it could cause any trade restraints.

The case is admittedly weak on the side of the Government, and a fiasco as the issue of the trial would attract little other than personal interest were it not that a bill for a law to stop such trading is now pending in the Senate, and it would be interesting to know what the Supreme Court might say in the premises before an anti-futures law should be enacted, approaching the principle of futures trading from the point of view of the anti-trust law. If it should be agreed by the Court that nothing would be done in restraint of trade by such trading, what excuse would there be for interfering with it by law? Even a corner manifestly benefits the producer, and it cannot be said to seriously injure a consumer who conducts his business, as the wisest cotton manufacturers do, by hedging his cotton purchases.

THE POMERENE BILL.

Let it not be deemed wearisome that we again remind the reader that it is his duty to urge upon the representative of his district in Congress to promote the movement of the Pomerene bill of lading bill through the House at the present short session. The bill has passed the Senate without opposition, in a quarter of the capitol where it was believed the opposition to the bill was best entrenched; it only needs the

House endorsement to put the bill on the statute book. If, however, the bill should now fail or go over without action, it will be dead and all of the work on the measure, covering some years, will have failed and will have to be done over, necessitating a campaign of educating a new body of legislators composed largely of new men at both ends of the capitol; and there will be the usual heart-breaking delays and disheartening encounters with ignorance of the measure and, perhaps, suspicion of it. Crowd the matter, then, to the utmost at this session and have an end of it. Let all help whole-heartedly and begin at once.

MR. JONES ON HIS TRAVELS.

President Jones of the National Association has been visiting a number of markets in the lake region during the past thirty days, and at Toledo was greatly impressed with the character and volume of the business carried on by the Secretary of the Association, something of which he knew of course through his service as director, but the whole truth, he frankly confesses, he had never realized. He is also "deeply impressed with the immense amount of work mapped out for this year," and with the further fact that the "Association is not on a proper financial basis" to do the work promptly. As this latter complaint seems to be congenital and chronic with associations in general, it is hoped Mr. Jones will not take alarm unnecessarily.

As to *Who is Who*, Mr. Jones surprises by saying that it is not in a position to print all the information the trade requires and actually needs. Why worry, though? Pass on a hint of the requirements and needs to the trade press; they have hitherto been liberal to the Association with their space and would gladly go on in the same way; and with three in the field, not to mention several trailers, they might between them hit some of the high spots.

THE EXODUS FROM THE FARM.

The exodus from the farm, of which so much account is made in the search for the high cost of living, is not of mysterious origin. It is the result of entirely natural causes and has been seen in the Old World as in the New; it means that life in the cities and towns has become more congenial and more profitable than life on the farm. Daniel Webster, discussing the proposed tariff of 1816, voiced a common objection that it would result in "drawing the great mass of American laborers from employment in the fields"; that "the young men would be forced to close their eyes upon the heavens and the earth and confine themselves in close and unwholesome workshops," etc. And succeeding 1816 the prophecy came true to the extent that when industry became more profitable in wages than the farm the "exodus" began, just as it did in Great Britain when, two decades later, the repeal of the corn laws made the urban industries there more profitable in wages than the farms.

For many years, however, in this country, whenever a commercial depression came, as it has come to the Western business world about every so many years, the American worker with ambition to get on and the spirit and capacity to work hard for himself, on losing his job or

on seeing his wages decline, left his city home behind and, with his family and his savings, moved "out West" to a farm; so that until the good lands of Uncle Sam became exhausted, a fall in wages or scarcity of work in the cities was relieved by a movement of the sturdy city stock to the farm lands of the West. Now, however, since there is no such chance to get a good farm for the asking, the "back to the farm" movement has largely ceased; but unhappily the flow into the cities still continues, because the very best of the young men from the country can still earn more in town than in the country, and there is also the glamor of city life besides. But the second generation of country men in town is sure to be less virile, less self-reliant, less capable, because physical vigor of working stock declines with city life; and to the new generation the gleam of the country dies away, or, where it does not, the power to follow the gleam has passed.

The problem before the humanitarian is not to turn the tide back to the farm, but to stop its flow from the farm by telling more truth about city life and city wages. The city is the opportunity of the exceptional man, but it is the grave of the incompetent and the prison of his progeny.

MR. WALLBAUM FLIMFLAMMED.

We had hitherto given F. C. Wallbaum, president of the Farmers' Grain Dealers' Association of Illinois, credit for discernment—the ability to see through a manifest fake; yet he surprised his friends the other day by walking deliberately into a political trap so conspicuous even a blind man would have seen it.

The Chicago *Examiner* in fruitlessly endeavoring to re-elect County Commissioner Bartzen ran into Jas. A. Patten, who opposed him. With the cunning of the shyster lawyer on the wrong side, the *Examiner* defended Bartzen by calling Mr. Patten a "grain gambler" and ignoring the criticism of Mr. Bartzen repeated *in extenso* from day to day the alleged history of Mr. Patten's wheat deal of 1909-10 in the *Examiner's* own peculiar way,—a way that is itself always a warning to any one who understands men or is perspicacious enough to discern the peculiar Mephistophelistic characteristics. But under the pressure of this sort of tom-tom and tommyrot, Mr. Wallbaum on October 31 gave way to his emotions, so far as to contribute by letter to the *Examiner's* Pecksniffian raid on Mr. Patten and the Board of Trade—paraphrasing in tearful phrases the Pecksniffian wail of the *Examiner*—

It is time honest citizens become more intimately acquainted with the real facts as to how such men have been able to amass the money belonging to unwary speculators, many of whom are unable to sustain a loss, which money has been very generously donated to Northwestern University in Evanston and invested in Chicago real estate for their own personal benefit.

One is quite sure that when Mr. Wallbaum recovers his post-election mental equilibrium he will see how unjust to himself this state of mind was. Being untrue in fact, in principle and in moral quality, Mr. Wallbaum's letter simply gave aid and comfort to the intolerable habit of yellow newspaper deception of the public and did nothing but to contribute to that dangerous and rising tide of urban discontent that one day may require all the Pattens and Wallbaums the country can muster to stem.

EDITORIAL MENTION

May the Thanksgiving turkey be large and juicy, and your business in proportion, and the profits in keeping.

Why does not the Minneapolis Chamber of Commerce cut the knot and establish a call? That would be fair to everybody.

The condition of the corn this fall seems to promise less trouble with excess moisture; but the wise buyer will put in a tester and use it just the same.

Order cars in writing and keep a record of the orders; that will put you on the safe side in case of the carrier's neglect to fill the orders promptly and as ordered.

"Traction" grain from central Illinois has become so important that the St. Louis Merchants' Exchange weight supervisors have been commissioned to weigh it.

Reciprocity on this side may be moribund, if not dead; but this fall's wheat prices on each side the line have made the question a very live one in the Canadian West.

A proposed remedy for the scooper in Ohio and elsewhere is to require him to take out an itinerant trader's license. Suppose he were required to execute a bond also as a guaranty of good faith?

President Eikenberry at Columbus and Mr. Cook at Dayton told the dealers some good things about corn and oats which are herewith passed on to the rest and recommended to their attention.

The advice has been given to the co-operative stockholders to "nurse your company." Certainly; and when you get tired, don't ask some one else to "hold your baby," as an Illinois company asked Bennett & Co. of Chicago to do.

There is no "bluff" or flim-flam about the Crop Improvement Committee's \$1,000 checks to organized counties; all a county has to do is to organize and show Mr. Ball it is entitled to the money and the check goes out. And the greater number of those \$1,000 checks are still waiting for claimants.

For the first time in many months there seems in the past thirty days to have been an epidemic of set-screw accidents in grain elevators. The laws in some states require the protection of these treacherous enemies to workmen; all states ought to have such laws. Mean-time is your elevator properly guarded?

The so-called Equity Co-operative Exchange of which Geo. Loftus of St. Paul is now a conspicuous member is much mad because the Minneapolis Chamber of Congress has not seen fit to admit the Exchange as a member and because the Chamber enforces the very obvious rule prohibiting members from dealing with brokers not members. It has presented its case to Louis D. Brandeis whose opinion that the

action of the Chamber may be the behavior of a "trust" is less appealing than some of his other work as a "free for all" adviser of the downtrodden and the oppressed of earth.

A new State administration means probably a new chief grain inspector, as one of the few spoils the Governor still has at his disposal. Thanks to the merit system, the office force itself cannot be summarily changed as in the old days when a new Governor meant a clean sweep as fast as the new broom dared do it.

The value of American farm crops increased from \$3,000,000,000 in 1899 to more than \$6,000,000,000—over 100 per cent while the rural population actually declined in numbers; yet the Society of Equity barkers still have the nerve to follow Senator McCumber with his wail of woe, that the farmer is the poorest paid worker in the country!

A clerk of the Minnesota Grain Co., Minneapolis, the other day lost \$115,000 in checks which the wind frisked out of his bankbook without his knowing anything about it until he reached the bank. Ultimately the checks were all returned to the company, but it is not reported whether the clerk succeeded in finding himself.

The present crop year has seen the sudden revival of export grain business at Galveston, which for the first time in four seasons is exporting wheat. New Orleans also has greatly increased its shipments abroad of corn and oats, as well as wheat, the business being such that all the port elevators are now in operation and comparatively busy for the first time in several years.

While it is true that a good many objectionable bills slip through during the short session immediately following a presidential election when the vote-catching instinct is temporarily in suspension, this disposition works both ways; and as the anti-futures bill now before the Senate appeals more strongly to the House demagogue and his followers, trade vigilance may be rewarded by the funeral of this legislative foolishness.

The articles on river traffic in hay and grain on pp. 256 and 262 are suggestive. The rivers are not "played out" by any means, but their usefulness certainly is limited by their condition and the condition of the wharfage. In these days machinery is needed to handle commodities like grain, which is moved on a very narrow margin, and such facilities are not everywhere available where a boat might ply with profit.

The appeal of Bennett vs. The Strawn Farmers' Elevator Co., recently passed upon by the Illinois Supreme Court adversely to James E. Bennett & Co., is warning that commission merchants and receivers doing business with farmers' elevator companies must understand fully the nature of the authority lodged in the managers of such companies. The supposition that in dealing with the agent in charge one is dealing absolutely with the company was in that case found to be an error; one deals with the company, the court said, in substance, only when

he deals with the president and secretary, the regularly elected officers, but not when he deals with the manager unless it can be shown that he has been formally constituted the agent in fact of the company with full power of attorney to bind the company by his acts.

Coburn of Kansas makes his annual after-harvest spiel about Kansas take the form of a neat booklet, entitled "Why We Like Kansas," a compilation of opinions by prominent Kansans. Coburn himself has this to say, that is particularly interesting in view of the way Kansas behaved on November 5 of this year:

Thinking with his brains rather than with his lungs has made the Kansan always the hardest man to boss, and least responsive to the party lash. As against his convictions he cares less for political or creed regularity than any other man on earth. Having reached a conclusion on a given issue, he acts or votes accordingly, regardless of consent or advice from any neighbor or nation. If later convinced he is in error he can reverse himself instantaneously, without flinching and without apology.

Of course he was dead wrong, as he now finds, having become involved with Uncle Sam about it; but one must confess to a feeling of sympathy with the country postmaster of Virginia who tried to abolish the Government seed donation nuisance in his neighborhood by confiscating the seeds the local Congressman sent to his constituents. Probably the seeds were no good anyway, and it wasn't fair for the Government to thus interfere with his own postmaster's private seed business; but Uncle Sam is somewhat particular about his own business, and our postmaster is "up against it."

The split-pea countervailing duty is going to be enforced against Germany, beginning on the 20th inst. That a tariff war will come of it is hardly expected; the commercial interests of the two peoples otherwise are so tremendous that a rupture over a comparatively trivial matter of this sort would be almost unthinkable. Were it not the policy of both countries to protect the interest of the producer rather than that of the consumer, it would seem a paradox to tax our own people 22c. a hundred pounds more than the ordinary tax simply because the Germans are willing to pay their own people a bounty to sell us the peas cheaper than they would be sold at home, whether that home be Germany or Russia. The whole business would be petty were it not that a policy is involved that is justified by the producers, whatever consumers may think.

The complaint of the Omaha Grain Exchange to the Commerce Commission that the railroad habit of building elevators and then leasing them at nominal rentals to private individuals is a discrimination against operators who build their own houses, opens up a question of immense possibilities—indeed, in some terminals it might involve the entire reorganization of the elevator system. At first flush one would say that all railroad elevators ought to be public houses; but as their operation involves other services than merely transfer and storage, the courts of the State, supported by the U. S. Supreme Court, long ago held that railroads are not permitted under their charters to act as warehousemen. The decision was considered righteous at the time (in the '70s, we think), but the changes in the grain busi-

ness since have neutralized practically every vital point of the decision that then seemed to justify the courts' position.

The proposition to greatly increase the demurrage charge to "trim up the car hogs" involves the necessity of reciprocal demurrage as a safety valve.

The reinspection rules need reforming in several markets. Who's going to make the assault on the slow ones that protect their own interests and let the shipper's "go hang"?

The grading episode at Norfolk has convinced some of the sceptics who "can't see how it pays," that affiliation with the National Association is a necessity for the country dealer—he must have his representatives on the ground with power to vote.

Buffalo should wake up. Their stock figures should include the amount in store. There should also be an estimate of the amount afloat. Give the facts and weekly changes. Keep the public informed. Make the statistics as reliable as possible.—C. A. King & Co.

Buffalo should report also receipts and shipments by rail. After close of navigation there seems to be no account kept of grain moving through that market, at least, that the public has access to.

The State of North Dakota on November 5 voted on the proposition—

Shall the legislative assembly be authorized and empowered to provide by law for the erection, purchasing or leasing and operation of one or more terminal grain elevators in the States of Minnesota or Wisconsin, or both, to be maintained and operated in such manner as the legislative assembly shall prescribe, and provide for inspection, weighing and grading of all grain received in such elevator or elevators?

The Secretary of State informs us that the result of the voting will not be known until the official canvass on December 10.

The last year's work campaigning in behalf of better farming has been so distinctly successful that this winter is bound to see a wide extension of the work. As has been well said, "This movement has gone beyond mere theorizing"; it is the real thing, the concrete results of which can be seen and felt. Here and there, at rare intervals, there is found a farmer, or even a group of them, who dislike "dictation by outsiders"; but for the most part they are deeply interested and when appealed to to do so they rarely object to lecturing or even to the use of their farms for demonstration purposes for the local benefit, when the work is directed by a trained agriculturist.

The Sleepy Eye Milling Company has been the successful litigant in a suit that adjudicates a principle of some considerable practical value. The carrier had dallied along with the delivery of a carload of coal, for which the milling company had long since paid before its delivery, suffering in the meantime material damage in its business because of the non-arrival of the coal, a "famine" being in progress at the time. When finally it did come to hand the company refused to accept delivery until the carrier had recognized its liability for damages caused by its delay. When under these circumstances the carrier sold the coal and remitted the proceeds to the shipping coal company, the milling com-

pany sued and recovered \$76.35 damages, the courts holding that the act of the carrier in converting the coal into cash and remitting to the consignor did not relieve it of its obligation to the consignee.

The possibilities of mischief to the world's commerce and trade, in commodities as well as in securities, of the war upon Turkey will only be measured when the Porte shall have surrendered and the diplomats proceed to remap Europe. It is more than likely that the Powers will find the allies well disposed to settle their own internal politics while still recognizing the ancient status of the Turk as the holder of Constantinople—a condition that Europe will doubtless not permit to be altered.

What is really meant by the proposition to discontinue "private crop reports"? How can they be discontinued? What is the object? Does anyone imagine any law, any rule, regulation or prohibition can stop private persons from seeking that information, compiling it and using it? The exchanges might prohibit their members publishing it, but they could not stop them from seeking it and using it; and it is much safer for the public to be protected by the publication of even guesses that are emitted over the signatures of responsible firms than that they should be doped, as they surely would be, by a flood of irresponsible substitutes.

Ohio certainly lost out on her wheat crop this past season; but there must be some reserve resources on her farms for all that, for the State Registrar of Automobiles says that 80 per cent of the motor cars registered by him come from the counties of Madison, Miami, Pickaway, Ross, Fayette, Licking, Montgomery and Fairfield, and the number of new machines registered exceeds fifty per day. Perhaps Banker Herrick, in his report to President Taft on the German co-operative credit systems, may have had in mind the financial difficulties some of these automobile farmers might find themselves in after running a joy-wagon for a few months, and proposes this means of relief.

The rice proposition is a queer one, in some respects. A necessity to millions of Orientals, this delectable cereal has always been a luxury, to Americans at least. Until recently the Carolinas were our only producing States, and the home supply was inadequate and the price high. When the Gulf coast of Louisiana and Texas and the plains of central Arkansas began to yield heavily, there seemed reason to believe that rice would grow into greater popularity as a cheap article of daily, not occasional, diet; but it has not. The rice men of the Southwest have long complained of this unappreciative attitude of the people, but at the same time every condition that promised to reduce the price of rice to the consumer and so encourage its consumption has been met with a firm resistance by the rice interests; and today there are rice associations of producers, millers, handlers, etc., that control this product, its price and its movement with as firm a hand as guides any incorporated "monopoly in restraint of trade" in the country. Is it any matter of surprise that the public does not show that warm affection for, and leaning

to, rice which it really ought, considering rice strictly on its merits as a foodstuff?

One might take more interest in that Western organized grouch, the Society of Equity, if the "equity" of the Society had any other appearance than that of a persistent and cultivated ache. The Evanston end of the game, one John R. Mauff, for example, protests to a New York paper that the great crops of this country in this year 1912 spell not a fair profit to the farmer, but an actual shrinkage of \$100,000,000 in his income, etc., although the Government says the farmers' income is bigger by 222 millions than in 1911. The ideal equity of this queer society is a condition of prices so permanently high that the very poor workers and producers of commodities in the towns shall remain in a state of perpetual hunger, not to say semi-starvation. Mr. Mauff ought to know that the number of people in that class in America has alarmingly increased while the farmer has been enjoying the fat crops and high prices of recent years, and be reasonable, if not decent, in his expectations.

The unexpected effects of a law enacted to serve a peculiar purpose is well illustrated by the operation of the law against the admission of pest-infected seeds and nursery stock in its application to imported white potatoes. When such tubers are scarce in the East and high priced, relief is had by imports, largely from Germany, one of the greatest producers, the duty being 25 cents a bushel. But it is now charged in New York that the alleged "potato king" of the country, a man from Colorado, not content with that protection, has been able to discover that a \$15,000 consignment of German potatoes, landed in October, for table use only, was badly infected with black wart, and has had them held up under the quarantine, or embargo, set up early in September against infected seeds and nursery stock. This should enable the king to put Colorado stock on the Eastern markets, which in the absence of a full crop in the East, had already begun to buy the German "spuds."

The decision of the New York Court of Appeals in the cotton B/L frauds is certainly a surprise. The impression has distinctly prevailed in the business world that forgery vitiated all paper; that there could be no "innocent third party" holding it, and that the victim of fraud of that character had his only remedy of the person who uttered the paper or passed it on for value, if he could be found and was financially responsible; that such paper bore the same relation to commercial documents that a counterfeit coin does to the true coin of the realm—that is to say, the innocent holder loses unless he can force restitution, and he is liable to the penalties of the forger when he tries to pass on the spurious coin. The New York court, however, has rejected this theory by refusing Springs & Co. relief as against the Hanover National Bank that had delivered to them spurious bills of lading for cotton and took their money therefor, although the bank had had opportunity before handling the paper to ascertain its true character.

TRADE NOTES

The Gardner Grain Weigher Co. of Ottawa, Ill., will build a new factory to replace the one destroyed by fire.

The Doniphan Grain Spouter Co. of Doniphan, Mo., has been incorporated with a capital stock of \$10,000. The incorporators are Esco McFarlin, A. Cline, K. K. Shenwell and J. F. Fulbright.

Hanson & Voight have organized at Wichita, Kan., to do a general business in grain elevator construction work. Mr. Hanson was for some time connected with the P. H. Pelkey Construction Co.

R. H. Folwell, head of the engineering department of the grain elevator building firm of James Stewart & Co. of Chicago, is taking a vacation with his wife in visiting some of the principal countries of Europe.

Sprout, Waldron & Co. of Muncy, Pa., have been greatly crowded to fill orders recently, with their factory running full time. The demand for "Monarch" Ball Bearing Feed Grinders has been especially heavy from all sections.

Among recent literature received is an interesting folder from W. H. Salisbury & Co. of Chicago, in which is explained the method of manufacture whereby superior results are given to users of the "R. F. and C." solid woven rubber belting.

One of the popular and useful devices for the grain elevator is the Automatic Dump Controller, manufactured by L. J. McMillin of 618 Board of Trade, Indianapolis, Ind. A trial of the device has almost universally resulted in one or more additional orders.

The Barnard & Leas Mfg. Co. of Moline, Ill., is pushing the work forward rapidly on its new plant which is expected to be ready for occupancy by January 1, 1913. It will be modern in all respects and of sufficient floor space over the old works to afford every facility to care for its rapidly growing business.

The Detroit Scoop-Truck Company of 2227 West Jefferson avenue, Detroit, Mich., desires to tell every grain dealer the reasons why he should install one of these handy tools in his elevator. It is built especially for grain elevator work and the time and labor saved by its use compensates many times over the first cost of its installation.

The season is approaching when souvenir novelties for the holidays will engross the attention of business and professional men. What is said to be one of the largest assortments of novelties in this country is handled by Alshuler of the Schiller Building, Chicago. An illustrated catalogue showing complete lists will be mailed to prospective purchasers.

The annual meeting of the National Gas Engine Association will be held at the Claypool Hotel, Indianapolis, Ind., December 3, 4 and 5. There will be the customary arrangements for exhibits of accessories, engine parts, etc. Reservations for space should be sent to R. A. Oglesby, Hercules Electric Co., Indianapolis, Ind., or to Albert Stritmatter, secretary, 224 East Seventh Avenue, Cincinnati, Ohio.

Fairbanks, Morse & Co., 900 South Wabash avenue, Chicago, always have something interesting and useful to say in their catalogues. Catalogue No. 544SV tells all about the Fairbanks-Morse oil engines, of which very many are doing excellent duty in grain elevators. Besides engines they have for prompt shipment wagon and portable scales, feed grinders, pumps, water systems, electric light plants, etc.

That grain dealers and millers are showing great interest in installing time and labor saving devices about the grain elevator and mill is evidenced by the popularity and number of orders being booked by the Nordyke & Marmion Company of Indianapolis, Ind., for the service elevators. Among the recent orders are included one for the North State Milling Company, Greensboro, N. C.; one for the Wm. Kelly Milling Company of Hutchinson, Kan.; two for the Ogilvie

Flour Mills Company of Medicine Hat, Canada, and one for the Robin Hood Mills at Moose Jaw, Sask., Canada.

The Manchester Ship Canal Company, Manchester, England, has placed a contract with Messrs. Henry Simon & Son, Manchester, for the construction of a 1,500,000 bushel reinforced concrete elevator on the American system. The elevator was designed by the John S. Metcalf Co., Limited, Montreal and Chicago, which is acting as consulting engineer for the Ship Canal Company for the work. It will be of reinforced concrete throughout, will have large capacity for receiving grain in bulk, storing, sacking and for shipping in sacks and in bulk. Approximate total cost, \$900,000.

At the regular monthly meeting of the Board of Directors of the Joseph Dixon Crucible Co. of Jersey City, N. J., held October 21, the following changes in the officers and Board of Directors were made on account of the death of Vice President William H. Corbin: Mr. George E. Long, former treasurer, was elected vice president to succeed Mr. Corbin; Mr. J. H. Schermerhorn, former assistant secretary and assistant treasurer, was elected to membership in the Board of Directors and treasurer of the company; Mr. Albert Norris was elected to the office of assistant secretary and assistant treasurer.

SOYA BEAN CROP.

Reporting on Manchuria's trade and commerce, Consul Lester Maynard, writing from Harbin, says of the soya bean crop that—

"Practically the entire soya bean crop of North Manchuria is shipped over the Chinese Eastern Railway through Suifenho, for exportation from Vladivostok. All the beans shipped from that port come from North Manchuria, so that the exports from Vladivostok give the most accurate figures obtainable of the foreign shipments of North Manchuria beans. Making allowances for stock on hand at the beginning and end of the year, it is estimated that 466,567 tons of beans were shipped during 1911, their estimated value at Harbin being \$7,600,376. The average value per ton at Harbin in 1911 was \$16.29. Expenses, bags, and freight brought the price f. o. b. Vladivostok up to \$24.22.

"The southern movement of soya beans through Kuangchengtzu and destined for the oil mills of South Manchuria or for exportation via Dairen or Newchwang is relatively small, although it was in 1911 undoubtedly greater than the 18,923 tons shown by the returns of the Chinese Eastern Railway. To take advantage of the lower freight rates of the South Manchuria Railway, which are designed to encourage the exportation of beans through Dairen, farmers in the southern part of this consular district cart their beans to Changchun rather than ship them north to Vladivostok via Harbin.

"Scattered throughout this district are a number of small oil mills, but the methods used are very crude and the production is only sufficient for local consumption. One oil mill at Harbin produces hempseed oil specially prepared for use in paint. This mill has a capacity of about 22 tons of hemp seed a day, from which 20 per cent of oil is obtained. The prices per pound obtained were as follows: Light color, first grade 71 cents, second grade 57 cents; dark color, first grade 62 cents, second grade 60 cents. Hemp seed is also shipped from this district to an oil mill at Nicol'sk-Ussurisk, which produces oil for cooking and for paint. This mill consumes annually 4,000 tons of hemp seed and 2,000 tons of soya beans, obtaining 22 per cent of oil from hemp seed and 12 per cent from soya beans. Bean oil sells for 64 cents per pound at the mill, hemp seed oil for 75 cents, and oil for paint for 85 cents. The bean cake is sold to Japan and the hemp seed waste is ground for cattle feed and sold locally. Most of the beans and hemp seed for this mill come from Manchuria, the rest being grown in Chosen near the border of the maritime provinces."

From South Manchuria, writes Consul A. W. Pontius from Dalney, "more than half the shipments of beans went to Japan, a good quantity, however, finding its way to Europe. Nearly 300,000 tons of bean cake were shipped to Japan, most of the balance going to South China. More than 20,000 tons of bean oil were exported to Europe and America, Japan taking but a small proportion of this commodity."

The Farmers' Elevator Co. at Paulina, Ia., has a library table in their office room that was made from the wooden walls of a grain spout through which over 300,000 bushels of oats had passed. The surface has been worn into various shapes that would make a wood carver envious.

ANDREW KELLY.

Andrew Kelly has been elected president of the Winnipeg Grain Exchange, the leading organization of its kind north of the international boundary. For the past thirty-one years Mr. Kelly has been engaged in the handling of the grain crops of western Canada, and enjoys the honor of being one of the oldest members of the organization, and he has further been longer connected with the grain trade than any other member of that exchange.

Mr. Kelly is a native of McGilvray Township, Ontario, having been born there in 1852. After attending the public and high schools of his district, he commenced farming with his father. When about twenty-four years of age, he gave up farm life and entered the grain business at St. Mary's, Ontario, where he continued in that occupation until he went west to Brandon, Manitoba, early in 1881. Shortly after arriving there he formed a partnership with some other pioneers of that district and started in the milling business under the firm name of Alexander, Kelly & Sutherland, the



ANDREW KELLY.

firm being one of the first milling concerns operating in the new territory. This organization continued until 1890, when the A. Kelly Milling Company was incorporated, a company which lost its identity a few years ago in the Western Canada Flour Mills Co., Ltd., founded by Mr. Kelly in conjunction with S. A. McGaw of the then Manitoba and Lake Huron Milling Co. of Goderich, Ontario.

Since the organization of the latter company Mr. Kelly has occupied the position of president, and his wide experience and sound judgment in connection with Western affairs are regarded as among the most influential factors contributing to the phenomenal success that the company has had in milling circles since its inception, about six years ago.

Not only in the grain and milling business has Mr. Kelly had a distinguished career, but also in the field of municipal affairs. For several years he took an active interest in politics in Brandon, of which city he was twice elected mayor by acclamation, occupying the chair for the years 1890 and 1891. He has also been a silent, but none the less effective, factor in the larger affairs of his adopted Province as well as in the Dominion matters. He is a typical Westerner, with a clear vision of his country's needs from the standpoint of agriculture, industry and finance; and his advice is sought on these topics by those interested or who desire to be interested.

Mr. Kelly enjoys the distinction of being one of the original members of the directorate of the Great West Life Assurance Company, one of the most successful Canadian companies in the insurance field, while his monetary interests are wide and varied, covering the entire field of Western finan-

cial endeavor. His appointment to the position of president of the Winnipeg Grain Exchange is one of honor, well earned and thoroughly deserved; and that this organization will make as much progress under his guidance as it has in the past is freely assumed by all those who are acquainted with him.

NEW WHEAT CONTAINER.

The *Pastoralists' Review* of Australia reports the invention by an Australian of a paper cylinder for use in shipping wheat. This receptacle, which is said to be "twice as strong as steel" has a capacity of from 25 to 150 bags of wheat. The cylinders may be filled on the farms directly from the ordinary combined harvester, then placed on an ordinary wagon, moved to the railway station and there placed in the usual trucks, to be conveyed to the seaboard. A feature of the cylinders is their cheapness *per se* and the fact that their use would save the cost of bags, which were a considerable item. Their use would not call for the alteration of any farm implements or wagons or railway cars. If necessary, the cylinders could be shipped and even sent abroad, and then returned with merchandise packed in them. The average life of the cylinders is computed at ten years.

SALES OF MOISTURE TESTERS.

The Hess Warming & Ventilating Co. of Chicago are experiencing a constantly increasing demand for their Hess U. S. Moisture Tester. Recent sales were made to the following: P. A. Feltner, Eureka, Ill.; Farmers' Co-Op. Elvtr. Co., Sibley, Ia.; Davy & Co., Evert, Minn.; H. A. Baxter, Washington, Ia.; W. L. Sanborn, Merville, Ia.; Farmers' Elvtr. Co., Craig, Ia.; C. F. Holt, Eden, Ill.; Hart Bros., Saginaw, Mich.; Davis & Milligan, Scranton, Ia.; Grain Growers' Grain Co., Winnipeg and Fort William, Canada; Trans-Mississippi Grain Co., Arthur, Ia.; Western Elvtr. Co., Beaver, Ia.; Meadows Grain & Coal Co., Meadows, Ill.; Harrison Bros., Chenoa, Ill.; Farmers' Elvtr. Co., Garden City, Ia.; Farmers' Elvtr. Co., Gowrie, Ia.; Egly-Doan Elvtr. Co., Ft. Wayne, Ind.; L. B. Spracher & Co., Ben Clare, S. D.; Allendorf, Ia., and Sibley, Ia.; Farmers' Elvtr. Co., Thor, Ia.; Stanford Grain Co., Stanford, Ill.; A. C. Petermeyer, Odebolt, Ia.; Omaha Grain Exchange, Omaha, Neb.; McCaul-Webster Co., Minneapolis, for their stations at Walthall, Neb., Calliope, Ia., and Lesterville, S. D.; Saunders-Westrand Co., Omaha, Neb., for their stations at Bloomfield, Crofton, Wausa, Magnet, Randolph, Sholes, Hartington, Belden, Laurel, Carroll, Wynot, Concord, Wayne, Waterbury, Jackson, Emerson, Pender and Bancroft in Iowa; Wright & McWhinney, Mimburn, Ia.; Melvin Fisk, Curlew, Ia.; Chauncey P. Coy & Son, Waterloo, Neb.; C. F. Noble, Hawarden, Ia.; Barryton Grain Co., Barryton, Mich.; Burt Elvtr. Co., Burt, Mich.; Chessening Grain Co., Chessening, Mich.; Colling Elvtr. Co., Colling, Mich.; J. W. Fate & Co., Blanchard, Mich.; D. Mansfield & Co., Remus, Mich.; Millington Grain Co., Millington, Mich.; Saginaw Grain & Seed Co., West Branch, Mich.; Prescott Elvtr. Co., Prescott, Mich.; Silverwood Elvtr. Co., Silverwood, Mich.; Turner Elvtr. Co., Turner, Mich.; Saginaw Mlg. Co., Saginaw, Mich.; Caro Elvtr. Co., Caro, Mich.; Clare Elvtr. Co., Clare, Mich.; Freeland Elvtr. Co., Freeland, Mich.; F. M. Houghton & Co., Clio, Mich.; Hess Elvtr. Co., Akron, Mich.; Merrill Elvtr. Co., Merrill, Mich.; Montrose Elvtr. Co., Montrose, Mich.; Sandusky Grain Co., Sandusky, Mich.; Tuscola Elvtr. Co., Caro, Mich., and Wheeler Elvtr. Co., Wheeler, Mich. Since last reported, Hess Driers have been sold to Lewis E. Sand Co., Albion, N. Y.; Saginaw Mlg. Co., Sandusky, Mich.; Farm Produce Co., Cass City, Mich., and Brand & Hardin Mlg. Co., Saginaw, Mich.

EXPORTS OF GRAIN, ETC.

The following is a statement of the exports of principal cereals, seeds, etc., for the month of September, 1912, and for the nine months ending with September, 1912, as reported by the Bureau of Statistics, Department of Commerce and Labor.

ARTICLES.	SEPT 1912		NINE MONTHS, ENDING SEPT.	
	1911	1912	1911	1912
Barley, bu.....	24,761	1,003,391	3,107,964	1,636,050
Corn, bu.....	3,751,914	829,859	50,606,176	24,916,881
Corn Meal, bbls.....	25,887	28,014	356,983	302,407
Oats, bu.....	25,914	6,150,052	1,412,808	7,967,428
Oatmeal, lbs.....	996,138	1,100,999	26,159,523	5,577,742
Rye, bu.....	225	133,257	446	135,010
Rye Flour, bbls.....				
Wheat, bu.....	4,937,451	13,141,931	22,989,081	25,140,008
Wheat Flour, bbls....	1,245,800	846,276	7,975,844	7,035,454

Rotterdam, which last summer accepted Philadelphia export corn certificates, has not as yet renewed the privilege for 1912 crop.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of October, 1912:

BALTIMORE—Reported by Jos. B. Hessong, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	1,002,450	856,244	773,774	647,850
Corn, bushels.....	276,920	176,655	101,892	441,204
Oats, bushels.....	5,542,016	45,581	5,486,902	100
Barley, bushels.....	8,942	947		
Rye, bushels.....	117,151	172,091		
Timothy Seed, bushels...	5,645	1,351		842
Clover Seed, bushels....	915			546
Hay, tons.....	5,047	5,972	556	950
Flour, barrels.....	254,576	264,333	97,018	141,895

BOSTON—Reported by James A. McKibben, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Flour, barrels.....	228,882	167,627	41,047	41,901
Wheat, bushels.....	1,652,489	976,537	1,573,980	944,811
Corn, bushels.....	89,156	165,460	51,711	583,189
Oats, bushels.....	520,500	417,822	105,966	1,406
Rye, bushels.....	2,429	2,616		
Barley, bushels.....	62,942	1,167	29,918	
Flaxseed, bushels.....				
Peas, bushels.....	4,890	6,602		
Millfeed, tons.....	1,087	833	177	270
Corn Meal, barrels.....	6,715	3,895	3,384	2,020
Oat Meal, cases.....	25,894	14,491	13,295	8,482
Oat Meal, sacks.....	10,225	33,052	4,100	14,425
Hay, tons.....	11,980	14,510	806	3,167

BUFFALO—Reported by Chamber of Commerce.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	10,721,310	10,774,909		
Corn, bushels.....	1,604,452	3,082,143		
Oats, bushels.....	1,530,800	1,037,493		
Barley, bushels.....	3,376,610	2,402,132		
Rye, bushels.....	240,087	290,500		
Other Grass Seeds, lbs...				
Flax Seed, bushels.....				
Flour, barrels.....	1,384,429	1,616,668		

CHICAGO—Reported by J. C. F. Merrill, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	5,161,400	2,067,900	3,396,250	2,332,800
Corn, bushels.....	7,616,000	6,880,950	6,853,500	7,753,250
Oats, bushels.....	17,857,100	9,206,000	14,652,500	5,550,400
Barley, bushels.....	3,717,300	3,888,600	542,500	664,500
Rye, bushels.....	660,800	329,500	265,600	133,000
Timothy Seed, lbs.....	5,505,400	4,011,200	4,372,900	2,034,500
Clover Seed, lbs.....	950,200	197,500	308,700	110,500
Other Grass Seeds, lbs...	2,188,900	1,266,400	1,828,700	1,145,500
Flax Seed bushels.....	118,300	122,100	34,000	52,000
Broom Corn, lbs.....	2,165,200	3,498,400	856,200	3,137,200
Hay, tons.....	23,567	27,497	2,545	1,071
Flour, barrels.....	863,031	538,044	831,912	627,581

CINCINNATI—Reported by W. C. Culkins, Superintendent of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	312,116	334,000	274,523	83,736
Corn, bushels.....	551,518	442,629	417,995	190,428
Oats, bushels.....	1,071,702	523,634	788,345	261,220
Barley, bushels.....	107,261	91,642	3,272	4,010
Rye, bushels.....	51,890	65,428	48,468	22,666
Timothy Seed, lbs.....	22,002	4,174	8,530	2,579
Clover Seed, lbs.....	4,089	1,813	657	709
Other Grass Seed, lbs...	26,192	10,932	20,487	9,255
Flax Seed, bushels.....		311		27
Broom Corn, lbs.....	245,500	137,894	29,254	17,800
Hay, tons.....	14,025	13,507	4,868	3,797
Flour, bbls.....	151,249	122,607	105,527	43,889

DETROIT—Reported by M. S. Donovan, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	314,000	518,379	80,000	66,414
Corn, bushels.....	276,000	142,140	197,540	57,254
Oats, bushels.....	427,500	331,203	61,200	17,512
Barley, bushels.....		81,850		
Rye, bushels.....	27,000	35,948	3,000	10,028
Flour, barrels.....	29,113	30,728	32,840	16,175

GALVESTON—Reported by John H. Upschulte, Chief Inspector of the Cotton Exchange and Board of Trade.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	1,624,000	148,000	1,867,756	56,000
Corn, bushels.....	54,000	18,000	23,142	10,000
Oats, bushels.....	3,000			
Barley, bushels.....				
Rye, bushels.....	23,000			
Flour, bbls.....			35,521	32,377

KANSAS CITY, MO.—Reported by E. B. Bigelow, Secretary of Board of Trade.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	5,698,800	2,714,400	4,933,200	1,596,000
Corn, bushels.....	338,750	861,600	169,200	729,600
Oats, bushels.....	762,300	525,300	567,800	462,400
Barley, bushels.....	14,000	42,000	6,600	30,800
Rye, bushels.....	37,400	4,400	16,500	2,200
Kaffir Corn, bushels....	83,928	61,607	33,035	36,607
Flax Seed, bushels.....	1,000			
Bran, tons.....	1,920	1,000	2,740	5,240
Hay, tons.....	32,460	31,680	5,688	4,008
Flour, barrels.....	33,500	13,250	255,000	166,250

MINNEAPOLIS—Reported by H. W. Moore, Statistician of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	18,084,960	13,726,750	3,288,990	2,011,070
Corn, bushels.....	229,200	382,050	128,500	144,440
Oats, bushels.....	2,533,330	845,920	2,087,190	403,260
Barley, bushels.....	5,216,890	3,802,630	4,252,580	3,405,650
Rye, bushels.....	1,016,880	450,360	773,730	74,590
Flax Seed, bushels.....	1,657,440	1,211,930	366,010	223,040
Hay, tons.....	4,140	4,200	940	900
Flour, bbls.....	72,568	41,436	1,892,021	1,635,773

MONTREAL—Reported by George Hadrill, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	8,764,943	2,817,720	6,541,470	2,212,761
Corn, bushels.....	86,456	796,969	11,277	612,604
Oats, bushels.....	1,243,453	539,611	1,367,873	410,563
Barley, bushels.....	300,746	175,846	218,527	2,000
Rye, bushels.....	98,744		78,070	
Flax Seed, bushels.....	71,821	6,411		
Flour, sacks.....	279,617	343,274	427,613	410,681

NEW ORLEANS—Reported by H. S. Herring, Secretary of the Board of Trade.*

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	1,431,000	95,000	1,445,689	32,013
Corn, bushels.....	240,000	124,500	88,465	220,857
Oats, bushels.....	247,000	122,600	25,129	1,913
Hay, tons.....	3,670	2,669	32	66
Flour, bbls.....	169,943	166,410	68,874	86,410

*For month of September.

NEW YORK—Reported by H. Heinzer, Statistician of the Produce Exchange.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	6,116,000		6,161,536	
Corn, bushels.....	515,607		68,160	
Oats, bushels.....	2,185,725		1,009,638	
Barley, bushels.....	622,763		303,633	
Rye, bushels.....	29,900		103,782	
Timothy Seed, lbs.....				
Clover Seed, lbs.....			hgs.20,066	
Other Grass Seed, lbs...	bgs.48,857		10,536	
Flax Seed, bushels.....	55,900			
Hay, tons.....	23,860		bls. 21,153	
Flour, bbls.....	926,103		457,981	

OMAHA—Reported by F. P. Manchester, Secretary of the Omaha Grain Exchange.

Articles	Receipts		Shipments	
	1912	1911	1912	1911
Wheat, bushels.....	2,721,600	1,438,800	1,556,400	1,260,000
Corn, bushels.....	429,600	1,128,000	261,800	1,171,000
Oats, bushels.....	2,051,900	987,700	1,830,000	306,000
Barley, bushels.....	215,600	841,400	63,000	103,000
Rye, bushels.....	58,300	12,100	4,000	2,000

PEORIA—Reported by John R. Lofgren, Secretary of the Board of Trade.

Board of Trade.				
Wheat, bushels.....	121,000	95,000	68,141	55,668
Corn, bushels.....	1,155,889	1,151,254	652,667	680,492
Oats, bushels.....	831,332	357,900	1,285,147	714,170
Barley, bushels.....	476,600	402,400	160,152	129,523
Rye, bushels.....	75,600	22,000	60,320	7,600
Feed, tons.....	4,249	8,347	4,465	8,344
Seeds, lbs.....	660,000	90,000	420,000	180,000

ELEVATOR AND GRAIN NEWS

ILLINOIS.

A new elevator is under construction at Lisbon, Ill.

Thorp, Scott & Co. have erected an elevator at Wapella, Ill.

Work is progressing on the new elevator at Fletcher, Ill.

The new Farmers' Elevator at Kappa, Ill., has been completed.

The new transfer elevator at Champaign, Ill., is nearing completion.

John T. Gelsthorp has gone out of the grain business at Beason, Ill.

John Woods of Gifford, Ill., has purchased the Hadden Elevator at Penfield, Ill.

The Farmers' Elevator Co. of Ashland, Ill., has made extensive repairs on its elevator.

The Farmington Grain and Lumber Co. has completed a new elevator at Farmington, Ill.

The Chatham Elevator Co. will rebuild the elevator that burned recently at Chatham, Ill.

The Farmers' Elevator Co. of Yorkville, Ill., has bought two Hall Signaling Grain Distributors.

Waller & Co., of Henderson, Ky., will erect a steel elevator at New Haven, Ill., to cost \$5,000.

The Triumph Grain and Supply Co. of Triumph, Ill., has increased its capital stock from \$8,000 to \$24,000.

W. R. Turnbull has completed a new elevator at Rohrer, Ill., and J. B. Farmer and sons are in charge.

The Farmers' Elevator Co. has purchased Cicero Alison's elevator at Alvin, Ill., instead of building a new one.

Meetings were held at Warsaw and Mallard, Ill., recently to consider the erection of elevators at those points.

The McFadden Co. of Forest City, Ill., has remodeled its elevator and increased the capacity to 44,000 bushels.

The property of Hargreaves & Brady at Cullom, Ill., has been purchased by M. R. Meents & Sons of Ashkum, Ill.

The Central Grain, Lumber & Supply Co. of Yorkville, Ill., has purchased two Hall Signaling Grain Distributors.

The J. J. Badenoch Co. of Chicago will erect a reinforced concrete elevator to replace the one that was burned recently.

L. J. Kaiser is erecting an addition to his elevator at Oakland, Ill., which will increase the capacity to 265,000 bushels.

R. K. Byerly of Catlin, Ill., will install two Hall Signaling Grain Distributors and two Hall Ear Corn Distributors in his elevator.

The Wallace Grain & Supply Co. of Ottawa, Ill., contemplates building an elevator on the line of the La Salle County Electric R. R.

The stockholders of the Farmers' Elevator Co. of Kasbeer, Ill., have voted to purchase the Dole Elevator, of which they have been the lessees.

O. H. Rink of Edinburg, Ill., will equip his elevator with two Hall Signaling Distributors for small grain and two Hall Ear Corn Distributors.

Farmers in the vicinity of Peterstown, near Mendota, Ill., will soon build an elevator, the C. M. & St. Paul R. R. having laid a switch to Peterstown.

The Farmers' Grain and Coal Co., organized recently at Fogarty, Ill., three miles south of Lincoln, plans to build an electric elevator having a capacity of 20,000 bushels.

The Consumers' Hay and Grain Elevator Co. of Chicago, has awarded the contract for the erection of a 1½-story hay and grain elevator which is to be 94x134 feet in size.

A new elevator will be constructed at Farmington, Ill., on the site of the Buckley & Pursley house that was burned recently. The structure will have a capacity of 12,000 bushels.

M. L. Filson is constructing a new concrete boiler room in his elevator at Ludlow, Ill., in which a boiler will be installed for the operation of his dryer which was built during the summer.

The Anderson Grain & Coal Co. has incorporated at Galesburg, Ill., with a capital stock of \$25,000. The incorporators are A. R. Anderson, Edward Lundgren, B. E. Hewitt, C. H. Anderson and F. R. Winger.

The Sparks Milling Co. of Alton, Ill., was recently given permission by the city council to erect overhead spouts across the street to connect its mill with a proposed elevator of 300,000 bushels' capacity, to be erected on ground 125 feet wide,

which the company has purchased recently. The house will be of concrete.

The Illinois Central Railroad has leased the Cairo Elevator at Cairo, Ill., to the Magee Grain Co.

The Gilmore-Thayer Co. has been incorporated at Rockford, Ill., with a capital stock of \$175,000, to deal in fuel, building material, grain, etc. The incorporators are Warren Gilmore, William W. Thayer, Howard W. Hall, Roy W. Burritt and John G. Balstop.

The Neola Elevator Co. has purchased a tract of land at Prairie Center, Ill., on which it will erect an elevator. R. A. Carter of Ottawa, general manager of the company, stated recently that the company is preparing to spend \$50,000 in new buildings at Prairie Center.

The Pontiac Farmers' Grain Co. of Pontiac, Ill., has thoroughly overhauled its house at Swygert, Ill., and installed new scales, man-lift and power, in addition to covering the structure with corrugated iron. The capacity of the elevator is 30,000 bushels. Daniel Froelich is manager of the Swygert house.

The McLeansboro Implement Co. has been incorporated at McLeansboro, Ill., to deal in farming implements, machinery, grain, hay and general merchandise. The capital stock is \$15,000 and the incorporators are Jackson S. Lockett, Joseph E. Rawles, F. R. Wilson, J. W. Wright and George Parkhurst.

Secretary Strong of the Illinois Grain Dealers' Association reports the following changes in the ownership of Illinois elevators during the month of September: Ferguson & McConnel succeed R. B. McConnel at Danville; Geo. C. Arnold succeeds Arnold Bros. at Thomas Station (R. F. D. from Alvin); the Farmers' Grain & Coal Co. succeeds Cicero Alison at Alvin; Davis & Warren succeed E. W. Davis at Chippis; W. R. Turnbull engages in business at Rohrer; Bankert & Son succeed S. K. Bankert & Son at Newman; Risser & Dale succeed Peter McDermott at Crescent City; H. E. Jewell engages in business at Portersfield (R. F. D. from Magnolia); Cuppy & Munson succeed the National Elevator Co. at Kemp; L. R. Garrett succeeds R. C. Parks at Bruce, and Moore Bros. succeed the National Elevator Co. at Blue Mound.

SOUTHERN AND SOUTHWESTERN.

F. Dalton is erecting a corn elevator at Mustang, Okla.

The United States Feed & Grain Co. has succeeded S. M. Bray & Co. at Memphis, Tenn.

The Taylor Grain and Hay Co. has completed an 8,000-bushel elevator at Corpus Christi, Texas.

The Longview Mill and Elevator Co. of Longview, Texas, is building an elevator to cost \$25,000.

The Barkmeyer Grain Co. is building a 15,000-bushel reinforced concrete elevator at Floydada, Texas.

The South Texas Grain Co. of Houston, Texas, has increased its capital stock from \$80,000 to \$120,000.

The People's Fertilizer & Grain Co., Inc., has been organized at Foley, Ala., with a capital stock of \$10,000.

The Farmers' Supply Co. of Woodward, Okla., has purchased property at Supply, Okla., where it will erect an elevator.

The Denison Mill & Grain Co. of Denison, Texas, will construct an ironclad addition, costing about \$1,000, to be used for storage purposes.

A. Waller & Co. of Henderson, Ky., grain dealers, have increased their capital stock from \$60,000 to \$600,000, half common stock and half preferred stock.

The Texas City Elevator at Texas City, Texas, which has been out of commission temporarily has resumed operations. This house has a bin capacity of 500,000 bushels.

The Knowles Grain Co. has been incorporated at Knowles, Okla., with a capital stock of \$10,000. The incorporators are C. G. Alkiri, A. C. Howe, W. R. Fay and F. E. Knowles.

Secretary Hays of the Greenwood Business League has been investigating the cost of building an elevator and a warehouse including a corn meal and feed mill at Greenwood, Miss.

The Settle Produce and Grain Co. has been incorporated at Houston, Texas, with a capital stock of \$5,000. The incorporators are John S. Callo-way, Lee C. Ayars and E. W. Settle.

The Columbia Grain Co. has been incorporated at Columbia, Tenn., with a capital stock of \$10,000. The incorporators are W. A. Dale, R. L. McKinney, E. E. Lemore and A. W. Lipscomb.

The Union Elevator Co. of Memphis, Tenn., has increased its capital stock from \$2,000 to \$40,000. The incorporators are L. P. Cook, J. T. Morgan, A. L. Hall, J. P. Edgar and A. B. Knipmeyer.

W. S. Jenkins and Arthur Jenkins will open bids Dec. 1, for the erection of an elevator at Leesburg, Va. It will be of frame construction with a metal roof and will be 30x80 feet in size. The daily ca-

capacity will be 3,000 to 5,000 bushels. A corn sheller will be installed in connection with the other equipment.

A farmers' co-operative elevator company is being formed at Texhoma, Okla., for the purpose of building an elevator.

The Crosbyton Grain and Produce Co. has been incorporated at Crosbyton, Texas, with a capital stock of \$1,000. The incorporators are Julian M. Bassett, A. B. Spencer, A. J. McKinnon and others.

The Glendale Hay and Grain Co. of Glendale, Ariz., has changed its name to that of the Walsh-Myers Produce Co. The capital stock of the company is \$100,000. LaFayette Myers is president and C. C. Green is secretary.

MINNESOTA AND WISCONSIN.

An elevator is under construction at Withee, Wis.

The old Reipke Elevator at Windom, Minn., has been dismantled.

Guy H. Stewart has entered the grain business at Alberta, Minn.

The Froeming Co. has completed a new elevator at Forestville, Wis.

The Coleman Implement Co. has constructed an elevator at Coleman, Wis.

The farmers' elevator at Grove City, Minn., has been opened for business.

A five-horsepower motor has been installed in the Farmers' Elevator at Dassel, Minn.

The Farmers' Elevator Co. of Hoffman, Minn., has completed an addition to its elevator.

The Ellendale Farmers' Elevator & Mill Co. of Ellendale, Minn., will remodel its elevator.

N. Eilen has purchased the elevator at Porter, Minn., formerly operated by Miller & Miller.

The Prescott Exchange of Prescott, Wis., has bought the new elevator at Ellsworth, Wis.

The Blue Earth Mill Co. contemplates building an addition to its elevator at Blue Earth, Minn.

The Lyman Grain Co. of Milwaukee, Wis., has increased its capital stock from \$5,000 to \$30,000.

The Merrill Mercantile Co. is constructing a three-story elevator, 32x60 feet, at Merrill, Wis.

The J. L. Ross Co. of Superior, Wis., has installed a Hall Signaling Grain Distributor in its elevator.

The Knowlton Grain Co. has purchased the business of the Hoag & Rankin Grain & Feed Co. at Waukesha, Wis.

The Campbellsport Milling and Grain Co. has organized at Campbellsport, Wis., and will erect an elevator in the near future.

The Fairmont Farmers' Elevator at Fairmont, Minn., was sold at auction Oct. 16, Henry Rippe bidding in the property for \$1,075.

The Warroad Grain and Seed Co. is building an elevator at Warroad, Minn. The first story will be used for potatoes and the second and third for hay and grain.

The Gibbon Farmers' Elevator Co. of Gibbon, Minn., has purchased the business and yards of the Midland Lumber Co. for \$3,704, possession to be given Dec. 1.

Fagg & Taylor have installed new machinery in Elevator "E" at Milwaukee, Wis., which they leased recently. The house has a capacity of 1,000,000 bushels.

The Frank B. Hoag Grain Co. has been incorporated at Milwaukee, Wis., with a capital stock of \$10,000. The incorporators are Frank B. Hoag, Killian Weber and Robert L. Holt.

Emil Hauterbrook is building a 20,000-bushel elevator at Green Bay, Wis., and the Milwaukee road will build a spur to the house so that it will be able to receive and ship grain by lake or rail.

The Schultz Bros., Inc., capitalized at \$50,000, has been organized at Sheboygan, Wis., to deal in grain, flour and feed. The incorporators are Martin Schultz, Herman L. Schultz and Arthur C. Schultz.

Row Manchester of Plainview, Minn., has purchased the line of elevators that formerly were owned by Jay Thompson. He will continue to operate the houses at Elgin and Viola, Minn., under the same managers.

Work has been started on the construction of a \$30,000 hospital elevator at Superior, Wis., in connection with the Great Northern Ry. system of elevators. The house will be used for the purpose of drying damp wheat. It will be of brick and concrete construction, with capacity for drying 50,000 bushels of wheat every 24 hours, and will cost about \$30,000.

The Speltz Grain and Coal Co. is building a grain elevator and coal pockets at Albert Lea, Minn. The foundation is of concrete and the sides are of braced cribbing. The capacity of the portion of the building allotted for grain is approximately 15,000 bushels. Electric motors will fur-

nish the power. A 16,000-pound scale has been erected on a concrete foundation.

Downey & Lacher have sold their elevator and grain business at Adams, Minn., to J. D. Schneisel of Ridgeway, Iowa.

The Erskine Elevator Co. has completed an elevator at Erskine, Minn., and Matt Johnson of Fertile, Minn., has been engaged as buyer.

The New Ulm Roller Mill Co. of New Ulm, Minn., has begun work on the construction of a 40,000-bushel elevator which will be 32x36 feet and 50 feet high. The building will be of frame construction and covered with sheet iron and cost approximately \$6,000.

IOWA.

Work is progressing on the new elevator at Newton, Iowa.

Charles Sauer is erecting an elevator at Quasqueton, Iowa.

Geo. Alexander has erected a new elevator near Albia, Iowa.

The new Farmers' Elevator at Libertyville, Iowa, has been completed.

An elevator has been completed at Palo, Iowa, and opened for business.

The Davis City Elevator Co. of Davis City, Iowa, has completed its elevator.

Roach Bros. are building an elevator, 72 feet high, at Plainfield, Iowa.

The Farmers' Grain Co. at Colo, Iowa, has erected a lumber shed 80x56 feet.

Paul Aking is considering the erection of an elevator at Grundy Center, Iowa.

The Blencoe Farmers' Elevator Co. has completed its house at Blencoe, Iowa.

The Farmers' Elevator Co. at Wesley, Iowa, has installed a five-ton outside Howe scales.

J. M. Munson has purchased a half interest in the S. E. Squires Grain Co. at Rippey, Iowa.

The Farmers' Elevator Co. of Holland, Iowa, has purchased a Hall Signaling Grain Distributor.

The farmers in the vicinity of Winfield, Iowa, have purchased the H. W. Van Dyke Elevator.

The Pocahontas Grain Co., incorporated recently at Pocahontas, Iowa, will soon erect an elevator.

J. T. Cook & Co. have purchased the elevator at Bristow, Iowa, formerly operated by Flynn Bros.

Flynn Bros. have disposed of their elevator and grain business at Allison, Iowa, to J. T. Cook & Co.

The Farmers' Grain and Seed Co., organized at Lamoni, Iowa, recently, will erect an elevator at once.

A Farmers' Co-operative Elevator Co. has been organized at Reinbeck, Iowa, with a capital stock of \$10,000.

E. E. Hayes & Son will erect a 12,000-bushel elevator at Mt. Ayr, Iowa, and milling equipment will be installed.

The Farmers' Elevator Co. of Onawa, Iowa, has installed two Hall Signaling Grain Distributors in its elevator.

The Newell Construction Co. of Cedar Rapids, Iowa, is building an elevator at Kiene, near Independence, Iowa.

H. A. Schmitt of Eldora, Iowa, has purchased the elevator at Hughes (R. F. D. from Eldora) from G. A. Lynk.

Alphonse Lear of Riverside, Iowa, will convert the building formerly occupied by his flour and feed store into an elevator.

A new grain firm has been established at Manila, Iowa, by E. A. Packard, R. Rasmussen and Frank Brown of the Manila Mill Co.

McKee Bros., dealers in grain, coal and implements at Conesville, Iowa, have sold their business to H. H. Owen and Wm. McCormick.

The farmers around Latimer, Iowa, are considering the formation of an elevator company for the purpose of taking over the business of Wm. Senf.

The Farmers' Elevator Co. of Onawa, Iowa, has placed the contract for its 50,000-bushel elevator with the Burrell Engineering and Construction Co. of Chicago.

H. A. Schmitt, proprietor of the M. & St. L. Elevator at Eldora, Iowa, has also purchased the C. & N. W. Elevator and placed Ray Lewis in charge of the latter house.

E. A. Packard has entered into partnership with R. Rasmussen and F. A. Brown to engage in the grain business at Denison, Iowa.

The Farmers' Grain and Lumber Co. has been incorporated at South English, Iowa, with a capital stock of \$15,000. W. H. Gemmill is president and John M. Van Kirk is secretary and treasurer.

The Farmers' Co-operative Produce Co. has been incorporated at Fort Atkinson, Iowa, with a capital stock not to exceed \$10,000. Among other activities, the company will deal in grain. The

president is Peter J. Smith and Philip Smith is the temporary secretary.

The Farmers' Elevator Co., incorporated recently at Lynnvile, Iowa, has practically completed its elevator.

The Neola Elevator Co. will dismantle the old elevator at Perry, Iowa, and erect a steel structure. The company is also building coal sheds in connection with its houses at Persia and Kenwood, Iowa.

The Sergeant Bluff Farmers' Elevator Co. has been incorporated at Sergeant Bluff, Iowa, with a capital stock of \$25,000. The stockholders are Hans Fredrikson, Lewis N. Carter and C. S. Murphy.

A new farmers' elevator has been completed at Hampton, Iowa, to replace the one destroyed by fire recently. It is thirteen feet higher than the old structure and contains two rooms for mill feed and salt and another for flour.

The Tama-Benton Grain Co. has been organized at Dysart, Iowa, with a capital stock of \$15,000. The company will take over the grain business of H. P. Jenson, who has conducted the elevator at Dysart since 1888. The consideration was \$10,000.

The Farmers' Elevator Co. at Grinnell, Iowa, contemplates building an elevator on a site next to the old house after which the old structure will be converted into a feed room, and corn and coal sheds. The cost of the improvements will amount to \$5,000.

EASTERN.

The Shredded Wheat Co. has begun work on its iron-clad elevator at Niagara Falls, N. Y.

Ewart & Lake are building an elevator and warehouse at Groveland, N. Y., costing approximately \$25,000.

George Cogswell has disposed of his flour and grain business at North Amherst, Mass., to Peter Hawthorne.

The Tioga Mill & Elevator Co. will enlarge its plant at Tioga, N. Y., by the erection of an addition 250x60 feet.

Herbert L. Kneen and C. Elmer Colby of Hartland Hill, Vt., have taken over the grain business of Richmond & Eastman at Woodstock, and expect to take possession about Jan. 1.

The Bahrenburg-Frey Co., capitalized at \$50,000, has incorporated at Rochester, N. Y., to deal in fruit, grain, produce, coal, etc. The incorporators are C. H. Bahrenburg, J. B. Frey and T. D. Steinhäusen.

The Parks Bros. Co. has organized at Pittsfield, Me., for the purpose of dealing in hay, grain and country produce. It is capitalized at \$5,000. Mary E. Parks is president and Llewellyn Parks is treasurer.

The Washburn-Crosby Co. will erect a concrete and steel elevator at Buffalo, as an addition to its milling plant. The house will have a capacity of 2,000,000 bushels and will cost approximately \$300,000. This will increase the storage capacity of the plant at Buffalo to 4,000,000 bushels.

OHIO, INDIANA AND MICHIGAN.

The Niles Grain Co. is erecting an elevator at Niles, Mich.

Charles Abell has completed a new elevator at Garrett, Ind.

The Luckey Elevator Co. of Luckey, Ohio, has re-roofed its elevator.

Geo. Leggett & Co. have remodeled the elevator at Bowlsville, Ohio.

H. S. Grimes has completed a dryer in his elevator at Lucasville, Ohio.

Jenkins & Cohee have installed a feed grinder in their elevator at Whitestown, Ind.

W. H. Danes & Co. are remodeling the old Bartlett-Kuhn Elevator at Evansville, Ind.

Knapp & Chase have purchased the grain business of C. E. Carpenter at Schoolcraft, Mich.

H. L. Harrington of Fowler, Ind., has purchased an elevator at Bob Roy, near Attica, Ind.

The Gray Elevator Co. has been incorporated at Rome, Mich., with a capital stock of \$10,000.

The Orleans Elevator Co. has incorporated at Orleans, Mich., with a capital stock of \$6,000.

The Saginaw Grain Co. of Saginaw, Mich., has established a branch house at Gaylord, Mich.

The Gladwin Elevator Co. has incorporated at Gladwin, Mich., with a capital stock of \$15,000.

The Standish Elevator Co. has incorporated at Standish, Mich., with a capital stock of \$12,000.

The Clare Elevator Co. of Clare, Mich., has increased its capital stock from \$10,000 to \$20,000.

J. A. Clinger has disposed of his elevator at Forest, Ohio, to C. E. Emory of Bellefontaine, Ohio.

The Bad Axe Grain Co., of Bad Axe, Mich., will build an elevator at Atwater, Mich., a new town which is being formed, about seven miles south-

west of Bad Axe on the new line of the Grand Trunk R. R.

A grain elevator, warehouse and feed mill will be erected at Kalamazoo, Mich., at a cost of \$25,000.

A new corn sheller and cleaner have been installed in the Farmers' Elevator at Hamler, Ohio.

C. H. Johnston of Pinola, Ind., has equipped his elevator with a Hall Signaling Grain Distributor.

H. M. Cohee & Son have disposed of the Avery Elevator at Frankfort, Ind., to Fonia Trinkle for \$9,000.

The Freeland Elevator Co. of Freeland, Mich., has increased its capital stock from \$10,000 to \$25,000.

The Detroit-Caro Elevator Co. of Caro, Mich., has increased its capital stock from \$12,000 to \$25,000.

A new elevator is under construction at Montezuma, Ind. A 25-horsepower gasoline engine will be installed.

The Mantua Grain & Supply Co. of Mantua, Ohio, is building a warehouse, 30x70 feet in size with basement.

The Niles Grain Co. of Niles, Mich., contemplates the installation of a corn sheller, chain drag and feed mill.

The Beaty-Doan Co. at Ossian, Ind., plans to erect an elevator to replace the one that burned in October.

The Memphis Elevator Co. of Memphis, Mich., has equipped its elevator with a Hall Signaling Grain Distributor.

Evans, Padgett & Shakleton of Fowler, Ind., have purchased the elevator at Atkinson, Ind., from Mr. McConnell.

Caughey & Carran, one of the oldest grain firms in Detroit, Mich., have been succeeded by the Caughey & Carran Co.

The Pears-East Grain Co. of Buchanan, Mich., is planning to install a feed mill, grain drier, dump and other new machinery.

Benjamin Bannister has disposed of the elevator at Lafontaine, Ind., to J. C. F. Martin and O. Miller, who took possession Nov. 1.

The Isabella Co-operative Farmers' Grain Co. has purchased the business and property of the Independent Elevator Co. at Leaton, Mich.

John A. Wright contemplates the installation of a new car loader, chain drag and an automatic scale in his elevator at Liberty Center, Ohio.

The elevator of the Michigan Milling Co. at Chilson, Mich., which has been idle since the death of Frank Reimann, has been reopened by Brogan & Brady.

The board of directors of the Farmers' Co-operative Elevator Co. at Sandusky, Mich., received open bids for the purchase of its elevator up until noon, Oct. 25.

The new Farmers' Elevator at Mt. Vernon, Ind., will be ironclad and of crib construction, and have a capacity of 30,000 bushels. It will be driven by electricity.

John F. Ruffing of Monroeville and Joseph W. Missler of Bellevue, Ohio, have purchased the elevator at Marion, formerly operated by the Ohio Milling & Elevator Co.

Mercer & Morris, who recently built an elevator at Kennard, Ind., have sold the house to George Bowen & Son of Millville, Ind., whose elevator at Millville burned recently.

Walter Jackson and John Wagoner have purchased the interest of Mr. Sheets in the Jones & Sheets Elevator at Sidney, Ohio. The new firm will be known as the Jones Grain Co.

The Western Coal and Grain Co. has been incorporated at Indianapolis, Ind., with a capital stock of \$10,000. The directors are Hiram W. Moore, C. M. Moore and Benjamin H. Weil.

John Doan of Thorntown, Ind., has purchased the Clover Leaf Elevator at Clarksville, Ind., from the Melott Grain and Milling Co., for \$10,000. The house has a capacity of 20,000 bushels.

Goodrich Bros. have awarded the contract for the erection of an elevator at Winchester, Ind. The house will be two stories high and 60x160 feet and the office structure will be 60 feet square.

Shelby Baughman, F. M. Wildermuth and J. M. Pence, all of Jackson Center, Ohio, have purchased an elevator at Ansonia, Ohio. Mr. Pence will remove to Ansonia and take charge of the house.

The Trenton Grain and Coal Co., capitalized at \$10,000, has taken over the elevator of the F. O. Diver Grain Co. at Trenton, Ohio. A. F. Babeck will manage the house. A. K. Augsburg is president of the new company and T. H. Bell is secretary.

The old community granary at New Harmony, Ind., which was constructed in 1819 by the "Rap-pites" soon after their settlement in Indiana, has been dismantled. The house was four stories in height and formed of heavy yellow poplar timbers, some 46 feet in length. The nails and all other

metals used were forged by hand. The property is owned by J. W. Hiatt, a business man of New Harmony.

The Cass City Grain Co. of Cass City, Mich., has purchased an elevator at Swartz Creek, Mich., which will be managed by Herbert Frutchey.

The Kirklin Grain Co. has been incorporated at Kirklin, Ind., with a capital stock of \$15,000. The directors are Amos L. Hiatt, L. S. Moore, James H. Sample, Lewis A. King, J. W. Willis, J. B. Bond and E. R. Pruitt.

John D. Menish, president of the Grand Trunk Elevator Co. of Port Huron, Mich., has announced that the company will expend \$10,000 for improvements in the way of a wharf extending 400 feet from the elevator. Work on the dock will not begin until spring.

S. D. Bailey & Co. of Wanatah, Ind., are building a 10,000-bushel elevator to be operated in connection with the old mill. It will be equipped with a 25-horsepower engine, sheller and cleaner. The Burrell Engineering and Construction Co. of Chicago has the contract.

The grain business of Ballard B. Yates & Co. at Kinderhook, Ohio, has been purchased by C. W. Baker & Co. Mr. Ballard has also taken over the interests of those associated with him in the elevator business at Williamsport, Ohio, and assumed entire ownership Nov. 1.

The Farmers' Grain & Coal Co. of Whiteville, three miles west of Metamora, Mich., has completed its iron-clad elevator, which is 78 feet high and has a capacity of 20,000 bushels. The house will be operated by a 50-horsepower gasoline engine and will be managed by C. E. Otto.

The Elwell Gleaner-Farmer Elevator Co. of Elwell, Mich., is building a grain and bean elevator, 80x30 feet on the ground and 50 feet high, to be completed by Dec. 1. The Burrell Construction Co. of Chicago has the contract. The 200 farmers constituting the company have subscribed \$10,000.

Plans are now under way for the construction of a wharf elevator and warehouse at Evansville, Ind., to cost about \$500,000. The plans under consideration call for a brick structure of several stories, to cover 400 by 200 feet of ground. The elevator will handle corn, taking it from the boats in the ear and shelling it before it is reloaded on the boats for shipment south.

The Saginaw Milling Co. is erecting a large bean and grain elevator in connection with its plant at Saginaw, Mich. The structure measures 50x70 feet and will be 137 feet high with a capacity for 300,000 bushels. A two-story warehouse, 50x112 feet, is also under construction. The buildings are of solid concrete construction. The Burrell Engineering and Construction Co. of Chicago has the contract and the work is under the supervision of Supt. S. J. Anglesey.

MISSOURI, KANSAS AND NEBRASKA.

E. D. Gould is building an elevator at Arnold, Neb.

The Derby Grain Co. has leased an elevator at Corning, Kan.

Sykes & Glynn have constructed an elevator at McLouth, Kan.

The Farmers' Elevator Co. will erect an elevator at Pickrell, Neb.

W. F. Probst has built an addition to his elevator at Arkansas City, Kan.

M. H. Good of Nortonville, Kan., is installing new machinery in his elevator.

The Glasgow Mill Co. has completed a 185,000-bushel elevator at Glasgow, Mo.

Hampton Bros. have purchased the Fredonia Grain Co.'s elevator at Fredonia, Kan.

A new elevator will be erected at Stramsburg, Neb., on the site of the old Hord Elevator.

Corn grinding equipment has been installed in the Rea-Patterson Elevator at Coffeyville, Kan.

The Farmers' Elevator Co. has organized at Minneola, Kan., with S. A. Stateler as president.

The Farmers' Grain & Stock Co. has incorporated at Creston, Neb., with a capital stock of \$9,000.

The Fredonia Grain Co. of Fredonia, Kan., will install corn grinding equipment in its elevator.

The Van Sickle Grain & Lumber Co. of York, Neb., will establish a branch at Springbranch, Neb.

A grain drier, 49 feet high, is being constructed in connection with the Blair Elevator at Atchison, Kan.

Jas. McGuire has purchased the elevator and coal business at Blue Springs, Neb., from G. W. Wine-land.

The Langenberg Bros. Grain Co. of St. Louis, Mo., has opened its new hay warehouse. The structure is 80x310 feet in size and has a capacity of 135 cars of hay.

D. S. Erni, formerly of the firm of Jones & Erni of Bison, Kan., has awarded the contract for the erection of a 10,000-bushel elevator on the site of

the former company's elevator, which was demolished by a cyclone the early part of the year.

The mill and elevator at Green Ridge, Mo., formerly owned by C. D. Hayburn, has been purchased by M. Botts.

Geo. W. Venner & Son of Lincoln, Neb., have purchased the grain business of T. C. Davey at Havelock, Neb.

A farmers' elevator company has organized at Fowler, Kan., with V. G. Howard as president, and a new house will soon be under course of construction.

The Farmers' Grain Co. has organized at Bancroft, Neb., with a capital stock of \$10,000. The company will be associated with the Farmers' Grain Co. of Omaha and will either lease or build a house at Bancroft.

Chas. F. Owen, who recently disposed of his grain and milling business at Brunswick, Mo., to his brother, W. S. Owen, has purchased the elevator at Lees Summit, Mo., from E. Clark.

WESTERN.

A new elevator has been completed at Judith Gap, Mont.

The A. P. Stewart Lumber Co. is building a grain warehouse at Lusk, Wyo.

The Montana Central Elevator Co. is building an elevator at Simms, Mont.

The Montana & Dakota Grain Co. is erecting an elevator at Wolf Point, Mont.

The Occidental Elevator Co. is building a 40,000-bushel elevator at Acton, Mont.

The Montana Elevator Co. has completed an elevator at Sulphur Springs, Mont.

The Royal Milling Co. is building a 25,000-bushel elevator at Columbia Falls, Mont.

The Cambridge Elevator & Mill Co. has completed a 75,000-bushel elevator at Cambridge, Idaho.

A farmers' elevator company has been organized at Haxtum, Colo., with a capital stock of \$10,000.

The Williston Mill Co. of Williston, N. D., has an elevator under construction at Antelope, Mont.

The Hungarian Mill & Elevator Co. of Denver, Colo., has added considerable new equipment to its plant.

The Idaho Mill & Elevator Co. has been incorporated at Rupert, Idaho, with a capital stock of \$10,000.

The Farmers' Elevator Co. will construct an elevator at Broadview, Mont., as soon as a suitable site is chosen.

The Great Western Milling Corporation of Los Angeles, Cal., is constructing grain bins in its plant at a cost of \$677.

The St. Anthony & Dakota Elevator Co. has awarded the contract for the erection of an elevator at Shelby, Mont.

The Hollister Grain and Elevator Co. has completed a grain warehouse at Hollister, Idaho. The structure is of wood covered with galvanized iron and is 42x48 feet.

Heslin & Fox, grain and feed dealers at Newport, Wash., are building additional storage room to their warehouses and installing a feed-grinding outfit at a cost of \$2,000.

THE DAKOTAS.

The new elevator at Burt, N. D., has been completed.

The farmers around Bowman, N. D., are considering the erection of an elevator.

J. D. Burkhardt is building a new elevator, 24x40 feet and 46 feet high, at Milbank, S. D.

The Imperial Elevator Co. of McHenry, N. D., has begun the construction of an elevator.

The new Farmers' Elevator at Chama (R. F. D. from Sentinel Butte), N. D., has been completed.

A farmers' elevator will be constructed at Kedron, a new town on the C., M. & P. S. R. R., eighteen miles east of Lemmon, S. D.

The Dakota Grain Co. of Edgely, N. D., is building elevators at Nortonville, Millerton and Sidney, N. D., all new towns. Hickox & Son of Minneapolis have the contract.

The Equity Elevator Co. has been incorporated at Abercrombie, N. D., with a capital stock of \$25,000. The incorporators are P. S. Larson, Andrew Baken, I. E. Hall and E. A. Staffne.

The Farmers' Elevator Co. at Bradley, S. D., has petitioned the State Railway Commission to order a connecting track laid between the M. & St. L. R. R. and the C., M. & P. S. R. R.

The New Co-operative Farmers' Elevator Co. has been incorporated at Hartford, S. D., with a capital stock of \$25,000. Henry E. Boy is the president and W. C. Muchow is the secretary.

The Canton Mill & Elevator Co. has been incorporated at Canton, S. D. The incorporators are J. A. Carpenter, C. L. Dewey, E. W. Jefferson, E. S.

Maynard, A. L. Loveless, B. H. Herman, C. A. Reynolds, C. A. Sogn and O. L. Sogn.

The Fullerville Grain Co. of Fullerville (R. F. D. from Gayville), S. D., will erect a 40,000-bushel elevator.

The Barth Elevator at Mott, N. D., which was taken over recently by Waesel Bros., has been purchased by the Empire Elevator Co., a subsidiary of the Osborne-McMillen Elevator Co. of Minneapolis.

The Lee Grain Co. has been incorporated at Reynolds, N. D., with a capital stock of \$25,000. The incorporators are D. J. Hennessy, and Henry Reichsteig of Reynolds and J. M. Johnson of Thompson, N. D.

CANADIAN.

An elevator has just been completed at Herschell, Sask.

The Continental Grain Co., Ltd., has been incorporated at Winnipeg.

The C. P. R. has announced that it will erect an elevator at Vancouver, B. C.

The Traders' Elevator Co., Ltd., has been incorporated, with offices at Neville, Sask.

The British America Elevator Co. of Winnipeg, is building an elevator at Ethelbert, Man.

The Aylesbury Farmers' Elevator and Trading Co., Ltd., has been incorporated at Aylesbury, Sask.

The Morse Elevator Co., Ltd., incorporated at Morse, Sask., recently, has completed its elevator.

The Farmers' Co-operative, Ltd., has purchased the elevator at Red Deer, Alta., from the Alberta Grain Co.

The Ogilvie Flour Mills Co., Ltd., has purchased the Morburn Elevators at Broadview and Oak-shalla, Sask.

The Early Grain Co. of Saskatoon, Sask., is building a large grain warehouse and will soon erect a 20,000-bushel elevator.

Plans are under consideration for the organization of a \$500,000 company at Regina, Sask., which will erect a 1,000,000-bushel elevator.

N. M. Patterson & Co., grain brokers of Winnipeg, are building a 100,000-bushel elevator at Fort William, Ont. The house will be steel construction.

It has been announced by F. E. Gibbs of Port Arthur, Ont., that the Dominion Grain Commission is considering the erection of an elevator at Vancouver, B. C.

The new 120,000-bushel elevator of the Maple Leaf Milling Co. at Brandon, Man., is in operation. It has 30 bins and is driven by electricity generated in the plant.

The government elevator which is being constructed at Fort William, Ont., by the Barnett & McQueen Co. will be equipped with a Morris Grain Drier of 2,000 bushels' hourly capacity.

Jones & Dill have sold their elevators at Warner, Milk River and New Dayton, Alta., to the Alberta Pacific Elevator Co. of which Sir Max Aitken and R. B. Bennett, K. C., M. P., are directors.

The Regina Storage & Drying Elevator Co., Ltd., has been incorporated at Regina, Sask., with a capital stock of \$1,000,000 for the purpose of erecting an elevator which will be of reinforced concrete.

Work has begun on the enlargement of the government elevator at Port Colbourne, Ont. The cabinet has let the contract for the addition to the Dominion Bridge Co. at a cost of \$201,000. The capacity of the house will be increased from one to two million bushels.

The Independent Grain Co., which previously had its main offices at Claresholm, Alta., has made Calgary, Alta., its headquarters. J. Cummings will manage the company's business from this point. It is the intention of the company to build several elevators in the near future.

The Robin Hood Milling Co. of Moose Jaw, Sask., has purchased six elevators in Alberta owned by the Walbridge Elevator Co. at High River, Woodhouse, Carstairs, Acme, Strathmore and Bassano. This milling company now owns eight elevators and is endeavoring to purchase others.

It has been definitely announced that the Dominion Government will soon dredge the Frazer River into the Pitt River to provide shipping facilities for the growing industries in that vicinity and that as soon as navigation for deep water vessels is possible, two elevators will be constructed at Coquitlam, near New Westminster, B. C., by an Alberta grain company.

It is estimated at Fort Worth that over \$125,000 will be expended in Texas this year in farm demonstration work. The Federal Government has appropriated \$60,000 of this amount and the balance has been set aside by the different commissioners' courts in the State. Texas has 116 demonstration agents in 116 different counties, 37 of whom are located in west Texas and 59 in the eastern section of the State, and according to reports there are 11,600 farmers co-operating with them in this work.

[Special Correspondence.]

GRAIN TRADE NEWS FROM TOLEDO.

BY E. F. BAKER.

Toledo, O., Nov. 12.—The grain movement in Toledo recently has been rather light. The water shipments have been about normal for this season of the year, but rail shipments have been slow on account of car shortage. The receipts from nearby territory have been light. Farmers in this section have but little wheat and what they have they are inclined to hold.

The weather conditions have been ideal for corn husking and farmers are getting as much of this work done as possible. The returns are not altogether satisfactory. Most of the corn being brought into the market is grading No. 4 white and sample. A large amount of moisture is also revealed by the tests. The first car of new yellow corn arrived at the Toledo market last Saturday and was received by the Central Grain Co. from a Bluffton, Ind., shipper. This car graded sample and the moisture test was 27.8 per cent. Later shipments are expected to show a better condition, but farmers are not yet ready to market their grain and will not be for some weeks yet.

The flour output is about normal and millers seem to have plenty of wheat to take care of their demand until after the first of the year at any rate. The output for the week just closed was 25,300 barrels. When the 'Change closed cash corn was quoted at 62c. for old and 53c. for new corn.

Charles D. Jones of Nashville, Tenn., recently elected president of the Grain Dealers' National Association, was in Toledo recently in conference with chairmen of the various committees to map out the year's program for the Association. Included in the conference were A. E. Reynolds of Crawfordsville, Ind., chairman of the legislative committee; J. W. McCord of Columbus, chairman of the executive committee, and John F. Courcier of Toledo, secretary-treasurer. The national headquarters of the Association are being maintained in Toledo. Mr. Jones in an interview given out while here expressed the opinion that following the holidays after the big surplus of corn has reached the market there will be a decline in corn prices.

The Pilliod Milling Co. of Wauseon has secured the contract for supplying the city of Toledo with 22,500 bushels of oats at 35 3-5 cents a bushel. Raymond P. Lipe of Toledo will furnish 475 tons of hay at \$17 a ton for immediate delivery and \$18 a ton for future delivery.

L. M. Smith of the Seed Trade Reporting Bureau of Chicago was a Toledo visitor recently. He was on his way to Lima, where he gave a demonstration of the Brown-Duvel moisture testers before the Tri-State Association.

Corn husking as a means of correcting morals may be looked upon as an innovation, but it was introduced by Judge Killits of the United States District Court of Toledo. He recently sentenced John J. Fredericks of Jerry City, O., to husk corn to pay his fine for sending an objectionable letter through the mail. To stimulate the youth to earn the money, the judge hung a suspended sentence of two years in the penitentiary over his head in case he fails to work as directed and pay the fine. Judge Killits thinks corn husking is not only a good way to earn money but a good way to keep the boy's mind occupied along proper channels.

E. W. V. Kuehn, prominent Toledo grain man, who has returned from a tour of the world, recently gave a course of lectures at Morenci, Mich.

The Washburn-Crosby Milling Co. is making plans for the addition of elevator and storage warehouses of concrete and steel, with a capacity of 2,000,000 bushels of wheat and a working house. The work will be started within a short time and when completed the company will have a storage capacity of 4,000,000 bushels.

President F. I. King of the Toledo Produce Exchange recently addressed a telegram to the Commerce Commission regarding the shortage in grain cars. According to the telegram railroad men were receiving grain cars in Toledo and refusing to give them up to grain dealers, holding them for other shippers. The allegations in the telegram were denied by the railroads, which claim that the law which says that a box car with the smallest leak ceases to be a grain car. A railroad man speaking of the subject said: "Our road recently received 200 cars, intending to use them for grain; only 70 were found in condition for this use."

A. P. Sandles, secretary of the Ohio State Board of Agriculture, was unanimously endorsed for Secretary of Agriculture in the cabinet of Woodrow Wilson at the meeting of the Tri-State Grain Producers' and Dealers' Association at Lima, O., on Friday. The Association endorsed also the practice of buying grains on what is known as the "clean grain basis." Formal protest was registered against the recent ruling of the Commerce Commission fixing a scale of minimum weights.

In response to a demand of the Grain Growers' Association of Manitoba that it should

take over all the terminal elevators at Fort William and Port Arthur, the Canadian government has decided to make a trial of owning and operating grain elevators with the new 3,000,000-bushel elevator now under construction at Fort William.

RUSSIAN RETALIATION.

Russia also is in no pleasanter mood over Germany's concealed export bounty system than are the split-pea dealers in this country, both objecting to treasury subventions paid to disorganize regular international currents of trade. In view of the export bounty paid to shippers of rye into Russia by the same "certificate" system that hides the bounty paid on split-peas shipped to this country, the Russian government has appointed a commission to look into the subject. This determination coincides with a very favorable harvest. In Berlin and Vienna the project is regarded as a measure of retaliation against the German system of grain customs certificates, which operates as an export premium.

"If the duty is imposed it will have," says an English authority, "a considerable influence on the frontier trade between Russia and Germany. Numerous mills have been erected in Russia, near the German frontier, which obtain their rye from over the border on very advantageous terms, and can send their bran back there duty free. Finland, too, if incorporated in the Russian customs system, would be affected, as she is a large consumer of German flour at present, and, in the absence of any import duty on German grain, could considerably extend her flour-milling activities."

OFFICIAL FOOD PRICES.

An old French law, enacted in 1791, gave the Bourse the right to fix the price of bread. In 1863 this law was altered in so far as in place of a permanent and official price the price was fixed locally. In Paris, for example, every fortnight the price of bread was published in the *Bulletin Municipal*. As a matter of fact, the baker did not act by it, because it only became obligatory when the prefect declared it as official, which, however, he could always do. The bakers still have the right to appeal, but, pending a decision, they are bound to sell their bread at the price officially fixed.

When this archaic method of settling bread prices was devised the number of bakeries was limited by law. In 1863, however, the restriction as to the number of bakeries was removed. Time has shown that in practice the consumer has not derived the slightest benefit from this "official" determination of price. Recent conditions in Paris prove this. In the richer quarters of the city it has been above the level of the official quotation, and in the working districts cheaper. Altogether it was rather bad business for the baker. Recently, when wheat was so scarce, the bakers in various towns declared they must shut down their ovens if they were not permitted to raise the price of bread. Such was the position notably in Toulouse, where the Socialistic municipality fixed the price of bread at 90 centimes, whereas the bakers demanded 1.05f.—*The Miller*.

INVESTIGATION OF TERMINALS.

Senator Kenyon of Iowa has offered the following resolution, now pending in the Senate:

"Resolved, That the Committee on Interstate Commerce be and hereby is requested to inquire into and make investigation of the practical operation and enforcement of the act to regulate commerce passed in 1887 and the acts amendatory thereof and supplementary thereto, particularly (1) as to the progress made by the Interstate Commerce Commission in devising a more practicable and equitable scheme of rate making; (2) what proof is required respecting challenged rates; (3) what burdens are imposed upon the public in attempts to secure relief; (4) to investigate the practice of carriers with respect to unjust discrimination between localities and between commodities and class freight; (5) to consider the practicability and advisability of Congress prescribing maximum and minimum rates on low-grade commodities moving in large volume; (6) to discover the present evils not reached by existing statutes and the necessity for a recommendation of additional legislation to correct abuses found to exist; (7) to investigate the ownership and control of waterfronts, harbors and wharves upon the seacoasts, on navigable streams and at lake ports by the railroads and the effect of such ownership and control upon the public welfare; (8) to investigate the ownership and control, operation, use and practices of terminal railroads and whether said terminal railroads are aids or hindrances to commerce, and (9) to recommend such additional legislation which said investigation may suggest as being necessary to correct abuses or untoward conditions found to exist."

COMMISSION

The Lyman Grain Company of Milwaukee, Wis., has increased its capital stock to \$30,000.

George Bingham is now the manager of the Lafayette, Indiana, branch of E. W. Wagner & Co. of Chicago.

Ware & Leland of Chicago, Ill., have established a branch office in the old Chamber of Commerce Building, Minneapolis, Minn. R. S. Stephens is manager.

The Kern Grain Company of St. Louis, Mo., has been organized with a capital stock of \$10,000. The incorporators are C. E. Kern, William Burk and W. M. Clark.

P. S. Bartlett, who has been associated with Hurlburt, Warren & Chandler for the past seven years, has embarked in the grain brokerage business on his own account.

Harry Rodgers, cash grain salesman for Lamson Bros. & Co., Chicago, is back on "change" again after a three months' siege of typhoid fever. He received a cordial welcome from his friends on his return to the floor.

Jas. M. Maguire, who has been and is still in the grain brokerage business at Campus, Ill., has formed a connection with Frank J. Delany, grain commission merchant of Chicago, and will act as cash grain salesman on the floor of the exchange.

On account of the death of the late Alex J. Ellair of the firm of Ellair, Huston & Co. of Detroit, Mich., Clifford R. Huston is now sole owner of the grain business. It will be continued under the firm name of C. R. Huston, with offices at 710 Chamber of Commerce Building.

The Albert Dickinson Co. of Chicago will soon commence work on its new buildings, which will be erected at Campbell avenue, Thirty-first street and the Michigan Canal. The company owns about 40 acres and it is estimated the completed plant will cost about \$1,500,000.

Jas. P. McAlister, shipper of grain and hay at Columbus, Ohio, has recently moved his general offices to more commodious quarters at 196 South Third street, Columbus. Mr. McAlister contemplates enlarging his business to include that of a general jobbing trade in field seeds in the near future.

Powell & O'Rourke of St. Louis, Mo., recently completed the rebuilding of their grain elevator and increasing the handling and storage capacity. It is a sacking and grain handling house rather than storage and has a capacity for handling 30,000 bushels daily of all kinds of grain. The storage capacity is about 20,000 bushels.

The many friends of O. C. White of Philip H. Schiffin & Co., Chicago, gave him a cordial welcome on his reappearance "on change" recently after leaving Washington Park Hospital, where he underwent an operation and recovered from a broken arm resulting from an automobile accident. His friends in the country may expect to see him soon too, sound as a dollar.

L. J. Bowman, actively engaged in the grain business in Chicago up to some 15 months ago, has formed a connection with the well known grain firm of the Carhart-Code-Harwood Co. of the Board of Trade Building, Chicago. Mr. Bowman was formerly of Griffin & Bowman, with Marfield, Tease & Co., and needs no especial introduction to central grain trade territory.

Charles Knox, for many years with the old grain firm of Reynolds Bros., Toledo, Ohio, has engaged with J. F. Zahm & Co. to act as salesman on change as well as to travel among the grain, seed, and milling trade. There will be many friends in the central states to welcome him back, as his friends were legion when he quit the road some half dozen years ago.

Harry W. Kress of the Harry Kress Company of Piqua, Ohio, has been admitted to membership in the Chicago Board of Trade and Toledo Produce Exchange. This company's business has grown very rapidly since its establishment by Mr. Kress a few years ago, and last year they handled about 1,500 cars of grain. Their principal business is with the grain shippers and millers of Ohio and Indiana.

The firm of Caughey & Carran, one of the oldest firms on the Board of Trade of Detroit, Mich., has been succeeded by the Caughey & Carran Company, Frank T. Caughey is president of the new company, C. M. Carran vice-president and W. R. Josaman secretary and treasurer. Closely allied with the Detroit company are the Rockefeller Grain Company of Carson City with four elevators, North Branch Company with two elevators, Gladwin Elevator Company, Standard Elevator Company and Elevator C Company, the latter in Detroit, each with one elevator. There will be other companies to take charge of the remainder of fourteen elevators which Caughey & Carran had throughout the state. The old firm had built up a very large business in grain and seeds and it will be continued by the new company as formerly.

THE EXCHANGES

All of the grain exchanges of the country were closed on Nov. 2 out of respect to the memory of the late Vice-President Sherman.

On October 15 a delegation from the new Fort William Board of Trade was in Chicago soliciting memberships in that exchange from this market.

The State Tax Commission of Minnesota values Chamber of Commerce seats at Minneapolis at \$3,500, on which assessment the annual tax will be about \$10.

The Chicago Board of Trade Mutual Benefit Association at Nov. 1 had 913 members, or 37 more than ever before. The value of memberships to beneficiaries is now \$3,004.

Sketches for the new Board of Trade building at Chicago have been prepared and submitted to the committee. The plan contemplates a 16-story building with exchange room on the second floor.

The St. Louis Grain Club of the Merchants' Exchange is so well pleased with the crop improvement work of the past season that it is preparing to continue its seed corn campaign for another year.

Sec'y Eugene Smith of the St. Louis Merchants' Exchange visited a number of the exchanges during the past thirty days investigating the statistical methods, with a view to possible changes in the practice at St. Louis.

The Receivers' Association of the Chicago Board of Trade at a meeting held on Oct. 23 elected B. S. Wilson president, Lowell Hoyt vice president, W. N. Eckhardt, George Wegner, Frank J. Delaney, Harry Newell and A. L. Somers directors.

F. F. Collins, E. A. Fitzgerald, James Walker, C. E. Nippert and W. H. Kramer have been appointed grain discount committee of the Cincinnati Chamber of Commerce to adjust differences arising in settlements on new gradings developed by reinspection.

The Cincinnati Chamber of Commerce has absorbed the Receivers' and Shippers' Association of that city and is now conducting its work as the Traffic Bureau of the Chamber of Commerce, with office at the general offices of the Chamber. Guy M. Freer will continue in charge of the management.

The grain standard committee of the Portland (Ore.) Chamber of Commerce held a meeting recently for the purpose of fixing standards of the 1912 crop of the Pacific Northwest. The following export wheat standards were decided upon: Milling bluestem, 57 lbs.; Red Walla Walla, 57½; White Walla Walla, 58; and export bluestem, 58; brewing barley, 46 pounds.

Effective November 1, 1912, under joint agreement between the Merchants' Exchange and the St. Louis Consumers' Coal Company, the Department of Weights of the Merchants' Exchange is now supervising the weighing of all hay, grain and feed arriving in St. Louis over the Illinois Traction System and unloaded in their yards in vicinity of the scale located at Second and Salisbury streets. The fee for weighing will be 15c per wagon load, with a maximum charge of \$1 per car load.

TRACK-BIDDING FROM MINNEAPOLIS.

A temporary tempest was created in the Minneapolis Chamber of Commerce on October 23 by the posting of an interpretation of Rule IV relating to track-bidding, the ruling of the directors being that "no Minneapolis firm making track bids for grain at country points may hereafter bid, after the Minneapolis market has closed for the day, except on a basis subject to changes in price at the opening on the day following."

The ruling was at once protested by track buying firms who maintained that the ruling would practically limit track bidding to 3¼ hours of the day; and as a buyer said, "The best telegraph service possible does not grant us an opportunity to do satisfactory business when we have only this length of time in which to operate. We simply cannot buy for Minneapolis; we have to desert this market and buy for other centers."

The affair created so much comment and protest, both locally and from the country, that on the following day the directors decided to withdraw the ruling. This step may have been influenced also by the action of the directors of the "Equity Co-operative Exchange" of North Dakota, of which Geo. S. Loftus of St. Paul is sales manager. This body, after listening to speeches by James Manahan and Louis D. Brandeis of Boston, had announced a purpose "to start proceedings against the Chamber as a violator of the anti-trust law." The particular grievance is the fact that A. A. Trovaten of Fargo had received no encouragement when he proposed to apply for membership some time ago in the Chamber of Commerce.

In reply to much local newspaper clap-trap on this particular feature of the incident, President Wells said: "It has been the policy of the Cham-

ber of Commerce to treat all applications on their merits and test them by the same rules of business integrity. The theory of the Chamber always has been to require fair dealing. To gain the desired end, that of fairness, the Chamber imposes many obligations through its rules and regulations that the general laws would not require. This sometimes causes it to be criticised by people who would use it for personal advantage, but on the whole its theory works much the best for all concerned." And it may be added "all" includes the country shipper in a very material way.

CHANGES IN EXCHANGE MEMBERSHIP.

Chicago.—Sec'y Merrill reports the following changes in the membership of the Chicago Board of Trade during October: New members—Peter F. Smith, Arthur Meeker, John Q. Puffer, Adolph E. Norden, Jas. M. Maguire, Henry F. Bartling, W. Arthur Stickney, Allan J. Cameron, Lewis J. Bowman. Transferred—Chas. M. Harrington, Chas. H. Wade, Jos. M. Hann, Harold L. Mack, Est. of Fred H. Weaver, Ward A. Stockton, J. Hendron Smith, Est. of Chas. Henry Smith, Est. of Edw. Dickinson.

Montreal.—Sec'y Geo. Hadrill of the Montreal Board of Trade, under date Nov. 5, says: "This Board is practically a Chamber of Commerce, its grain members forming but a small proportion of its total membership; moreover, resignations from this Board are extremely rare. The only new members (connected with the grain trade) admitted since September 1 are the following, and they were admitted in October: J. A. Allan of Jas. Carruthers & Co., Ltd.; Chas. A. Robinson of Robinson-Oliver Grain Co.; and Henry Wheatley of the firm of Edgar Judge, all in Board of Trade Building."

Richmond.—Sec'y Y. E. Booker of the Richmond Grain Exchange reports that R. S. Christian has been admitted to membership in that body.

St. Louis.—Sec'y Smith reports that the following new members were admitted to membership in the Merchants' Exchange at a meeting of the Board of Directors on the 8th inst.: Ed. Schurmann, Hanover Star Mfg. Co., Germantown, Ill.; H. H. Savage, W. L. Green Com. Co.; Julius Schuermann, O'Connor Market Reporter Co.; Henry Potter, stock and bond broker; W. T. Anderson, Boone County M. & E. Co., Columbia, Mo. The following members resigned: Chas. P. Cummings, Geo. F. Tower, Jr., Henry S. Potter, Edwin Wagner, Charles P. Burdeau.

FAREWELL TO THE FOREIGNERS.

The farewell to the foreign delegates to the fifth International Congress of Chambers of Commerce took place at New York on October 18, a dinner closing a two days' series of entertainments. At the time M. Louis Canon-Legrain of Mons, Belgium, who has been president of all five International Congresses, expressed his gratitude for the hospitality extended to the delegates by the citizens of all the American cities visited.

Addresses were made by men representing the great commercial interests of New York, among whom was John Aspegren, president of the Produce Exchange and founder of the Swedish Chamber of Commerce in New York, who delivered six brief addresses, speaking in English, French, German, Swedish, Norwegian, and Danish. The English speech was in part as follows:

"I greet you here today as special ambassadors of prosperity and peace. Prosperity means to have what you want when you want it and what you need when you need it. There is only one way to accomplish same, and that is by means of trade. Trade means to exchange what you don't want and don't need for what you do want and what you do need; and you gentlemen, being representatives of the highest type of trade, which brings with it prosperity, are therefore makers and ambassadors of prosperity."

"What I have said before in regard to trade refers in an even larger degree to international trade. Nations at war with each other cannot trade. War kills trade and thereby prosperity. Traders and representatives of trade, realizing this, are therefore the greatest antagonists to war, and in reality international trade constitutes the best foundation for the future peace of the world. Your resolution at your congress in Boston demonstrates fully the truth of my statements and I therefore greet you as ambassadors of prosperity and peace alike."

ANNUAL MEETING OF THE COUNCIL.

Secretary Pickell of the Council of Grain Exchanges, in preliminary notices of the next annual meeting at Chicago on January 16 and 17, among other things says:

"The fourth annual meeting should be the best meeting which has ever been held, because the Council has been doing things. We have been giving the grain exchanges more publicity than they have ever had before, and we have been working in conjunction with other associations in the interests of a good bill of lading."

"It now seems that one of the most interesting topics which will be discussed will be in the report

of the chairman of the Uniform Grades Committee, E. H. Culver of Toledo.

"Dr. J. W. T. Duvel, crop technologist in charge of grain standardization of the U. S. Department of Agriculture, has promised to be with us in January, and by that time the facts which the Department of Agriculture has been working to secure will be ready to be made public."

"We will, however, have to unlimber our batteries to secure uniform rules among the grain exchanges, for while this is one of our most important functions, we have made the least progress in uniformity of rules, notwithstanding we have done the most work on this particular point. A reformation is a matter of evolution and will take time. There is no question that it will be necessary to outline a very emphatic publicity campaign at the January meeting, together with a legislative campaign, and money will have to be raised to support it."

DINNER TO PRESIDENT JONES.

On October 14 the Nashville Grain Exchange gave a complimentary dinner to Chas. D. Jones in congratulation upon his election as president of the Grain Dealers' National Association. About 125 members and guests were present. President E. M. Kelley of the local Dealers' Association presided and S. G. Douglas made the congratulatory address to Mr. Jones. He was followed by M. T. Bryan, president of the Cumberland River Improvement and Navigation Committee, Senator Luke Lea and several others, and congratulatory telegrams were read from Bert H. Lang, St. Louis; Charles England, Baltimore; Hon. E. W. Wade, Omaha; C. B. Riley, Indianapolis; Jas. L. King, Philadelphia; B. A. Lockwood, Des Moines; R. W. McCalla, Louisville, and E. C. Eikenberry, Camden, Ohio.

Mr. Jones, in his reply, as briefly reported by a local newspaper, said he "would truly have a heart of stone if he were not touched by such a showing of friendship—he had never realized how essential friendship is, and that he knew that the satisfaction of it to be far more than that of great riches."

"In speaking of his new position, he claimed no honor to himself, but had his chief satisfaction in the fact that a Southern man had been deemed worthy of the position. He told how the administration of the National Association had always been conservative, honest and fair, and that its hand had always been on the pulse of the trade. Since he had fought in favor of the McCumber bill and the Watson bill years ago he had always stood for federal control and that now he felt great pleasure in the fact that the Government may lead the grain business of the country soon to a better plan. The convention at Norfolk asked that the Government standardize all grain measures and make all associations adopt the standards; and it is now believed that the Government has the power to control the situation as it could not otherwise be controlled."

TRADING IN BONDED WHEAT.

The New York Produce Exchange on Oct. 31 adopted the report of the special committee recommending the establishment of a market in the Exchange for trading in Canadian (bonded) wheat futures. This report had been made about a week previously by the special to the grain committee consisting of A. C. Field, William Riemschneider, William Beatty, H. G. Graff and Kenneth J. Muir.

On Oct. 31 after the members (to the number of about 60) of the grain trade of the Exchange had approved the report, the special committee was instructed to formulate plans and rules for conducting the business and to name a date on which trading shall begin. The gist of the special committee's report is as follows:

"The committee has considered the proposition referred to, and it is our opinion that this Exchange should inaugurate future trading in bonded wheat; and we recommend that the committee on grain have drafted and submit to the grain trade for adoption suitable amendments to the grain rules to provide for that class of trading; the contract grades of wheat deliverable on Winnipeg contracts to be deliverable at New York, on Dominion certificates, with New York certification as to condition."

"The Grades deliverable on Winnipeg contracts are No. 1 Northern, or (at a premium of 1 cent per bushel) No. 1 hard, or (at a discount of 3 cents per bushel) No. 2 Northern, or (at a discount of 8 cents per bushel) No. 3 Northern."

Archibald Montgomery, Jr., of the firm of Maguire & Jenkins, the most persistent advocate of trading in Canadian wheat futures, in an interview with a representative of the Journal of Commerce said recently:

"The matter is of enough importance in my judgment to be of interest to the American public. New York bankers, railroads, the State and city of New York, as well as of vital interest to the grain trade of New York. James J. Hill predicted some years ago that the United States would soon be an importing country of wheat; and while this year's bumper crops prolong the time when his prediction will come true, the American farmer is rushing to

Canada—150,000 this year, against 2,500 ten years ago—where he can find cheap virgin soil, with but 7 per cent of the tillable land in the great Canadian Northwest under cultivation, and where the expense of fertilization is eliminated.

"America today is raising about 700,000,000 bushels of wheat with a population of say 95 millions; Canada is raising 200,000,000 with a population of 7½ millions. The great surplus for export is coming from Canada in the future. It is the surplus that makes money for the railroads, our new canal, the merchant, the broker and storage warehouse man and steamship people. If then it is the surplus that makes money for all the middle men, anything we can do to facilitate the handling of it should help in the good work.

"A market such as our special committee recommends will do it because, on account of severe winters in Canada, where it is almost a physical impossibility for the railroads to haul the grain on account of difficulty of getting up steam, the snow blockades, and the fact that the grease in the axle cups freezes, forces the merchants to rush their surplus grains east during water navigation.

"At present you can ship the southern route via American waterways about two weeks longer than via Canada, and with our enlarged Erie Canal it will be possibly much longer and much cheaper as well.

"Now, it strikes me that the merchant of Canada will be more apt to ship much larger quantities our way if he can hedge his holdings in a market in the East, where he can deliver his goods if manipulation takes place or export demand falls off, rather than ship to Montreal, with only an opportunity of futures in Winnipeg, where he would find the same insurmountable difficulties in shipping back West again in winter, to say nothing of the wasteful expense of doing so.

"The European merchant would prefer to buy his futures and take his wheat in New York and do his business through his New York bankers, and all this business done on and through the New York Produce Exchange."

The new C. P. Ry. tariff from western Canada to Duluth, Superior and Minneapolis will most probably turn much grain in this direction, greatly to the relief of the Canadian West, which last winter was able to use the head of the lakes facilities after Port Arthur and Fort William and the entire elevator system of the West had become congested. The New York system of taxing will be of great benefit to that movement and to those interested in it.

THE WORLD'S LAWS VS. FUTURES.

The British government on October 19 published a "White Paper" which contains a statement of the laws in force in all occidental nations relating to gambling in option and future contracts. The reports are summarized as follows (quoted from the *Journal of Commerce*):

In Canada Sec. 231 and 987 of the Criminal Code make guilty of an indictable offense, punishable with fine and imprisonment, any person who, with a view to obtaining profit or gain by the rise or fall in price, deals in stocks, goods, wares or merchandise without the bona-fide intention of acquiring or selling them, or in respect of which no delivery is made or received; and every office or place where such transactions are carried on becomes a common "gaming house." The federal authorities are not, however, aware of any prosecutions under these sections. It is now stated that no legislation bearing on this matter has been passed by any of the provincial legislatures.

There is no legislation dealing specially with "option" and "future" contracts in Belgium, Bulgaria, Denmark, Portugal, Russia and Sweden. In both Russia and Sweden, however, committees have recently been appointed to investigate the matter. In Italy and Serbia "option" and "future" contracts are permissible. In the Argentine Republic "gambling on 'Change'" is forbidden by Article 80 of the Commercial Code and the regulations of the Stock Exchange, drawn up under government approval, also prohibit all operations included under that term.

As regards Austria-Hungary, there is in Austria a law of January, 1903, concerning the organization of exchanges, which prohibits dealings in "futures" in cereals and mill products and imposes penalties on persons who habitually conduct such transactions or who willfully influence the price quotations of cereals and mill products by bogus sales. In Hungary there is no legislation of this character.

In Egypt, by a law of 1909, exchanges are regulated by the state, and transactions in "futures" are declared valid, even where their object is merely the payment of differences. They must, however, to possess validity, have been carried out on an authorized exchange and in accordance with its regulations.

In regard to France, the finance laws of 1911 and 1912 confine the actual carrying out of dealings (whether "spot" or "future") in produce or merchandise to brokers, commission agents and persons who make it their regular business to act as intermediaries in transactions of this nature. All per-

sons not professionally so engaged must make use of the agency of persons who are so engaged. Such brokers, etc., are bound to keep a register of all their dealings in merchandise or produce, and they must send to their clients an extract from this register, within twenty-four hours of the completion of the bargain. A tax is leviable on each transaction; and the register, as well as back files thereof, must be shown on demand to the officers of the administration. By a bill amending the penal code, which was introduced into the Chamber of Deputies in 1911, but has not yet been enacted, any manipulation of the price of merchandise or produce with the object of "unlawful" speculation is to be made a penal offense. Lastly, a bill has recently been introduced into the Chamber of Deputies by the French government for the regulation of merchandise and produce exchanges. It provides *inter alia* that brokers may not become parties (*qua* buyer or seller) to transactions with which they are entrusted, and any dealings in merchandise or produce elsewhere than on an authorized exchange are to be void. An extension of the time for delivery beyond the actual date of the settlement is conceded.

As regards Germany, the bourse law of 1896, which prohibited "time bargains" in agricultural produce, has been superseded by a law of 1908. It is stated that "time bargains" in any kind of produce other than corn, corn milling produce and combed wool, which are concluded under certain specified conditions, partly identical with those applicable to similar transactions in stocks and shares, have the same legal validity as "time bargains" in stocks and shares; and a plea that a transaction had for its object merely the payment of differences is held not to invalidate it. The Imperial Federal Council may, however, at any time suspend any or all "time bargains." With regard to "time bargains" in corn and corn milling products, it appears that (a) these transactions are, as such, subject to special provisions determined by the Imperial Federal Council, and (b) both contracting parties in such transactions must be either themselves the producers or manufacturers of goods of the kind dealt in, or they must be merchants or registered companies regularly engaged in "buying and selling or advancing money upon corn or corn milling produce." The willful conclusion of transactions of this nature on an exchange in accordance with the conditions applicable to other "time bargains" is now made a penal offense.

TRADE WITH OWN TERRITORIES.

The trade of the United States with its noncontiguous territories will amount to 250 million dollars in the calendar year 1912. Statistics of the Bureau of Foreign and Domestic Commerce show that during the eight months ended August 31, merchandise shipped from the United States to the noncontiguous territories amounted to 74 million dollars in value, against 61 millions in the same months of last year, and that the merchandise received from these territories amounted to 97½ million dollars in value, against 80½ millions in the corresponding months of last year. This is an increase of 30 million dollars, or more than 20 per cent, in the single year.

The gain in the trade with the noncontiguous territories (practically untaxed) has been far greater than that in the trade with foreign countries (taxed). The figures of 1912 will exceed by 150 per cent those of a decade ago, while the trade with foreign countries for the same period shows a gain of approximately 75 per cent only. The trade with Porto Rico in 1903 amounted to about 23 million dollars in value, while in the current year it will amount to about 75 million dollars, or more than three times as much as a decade ago. The trade with Hawaii in the year ended June 30, 1903, was 37 million dollars in value, and in the calendar year 1912 will amount to about 85 million dollars, an increase of over 130 per cent in a decade. With the Philippines, the trade in 1903 was 15 million dollars in value, and in the calendar year 1912 will amount to about 45 million dollars, having trebled in that period.

Manufactures form the bulk of the 110 million dollars' worth of merchandise passing to the noncontiguous territories in 1912, and sugar, tobacco, fruits, fish, copper and hemp are the principal articles forming the 140 million dollars' worth of merchandise being received from the territories in question. Sugar forms the bulk of the merchandise received from Hawaii and Porto Rico; hemp and sugar are the largest single items from the Philippines, and canned salmon and copper the largest in the merchandise received from Alaska.

Reports from various sections of North Dakota by the Better Farming Special Service Bureau at Grand Forks, indicate that the corn crop has not matured this year as it should, but A. F. Borchert, in charge of the Stutsman district, reports that the farmers in that part of the State are almost a unit in their determination to try to raise more and better corn next year.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

Rights of Factor.

In a case where oats were shipped to one who was engaged in the business of selling grain on commission, the Supreme Court of Indiana says (*Duffy vs. England*, 96 Northeastern Reporter, 704), that a factor who has made advances on the credit of goods consigned to him for sale has a lien thereon for the sums advanced and has the right to sell enough thereof to satisfy the lien; and after the advancements are made, the factor is not bound to obey the subsequent instructions of his principal as to the sale; and if the factor demands repayment of the sums advanced and the principal refuses payment, he may after reasonable notice sell enough of the property to satisfy his lien, although in so doing he violates his principal's instructions; and if the sale is made in good faith, for the best prices obtainable, and the proceeds thereof are not sufficient to satisfy the lien, the principal is liable for the amount of the deficit.

Liability for Loss of Wheat at Elevator after Acceptance by Carrier.

A car placed on a side track to an elevator was loaded with wheat and the railroad company issued a receipt in the form of a bill of lading therefor, marked "south bound," it being intended that the car should be moved to the south-bound track at a nearby station, when the regular bill of lading would be issued; but the car was destroyed by fire before being moved. In holding the railroad company liable for the grain, the Court of Appeals of Kentucky says (*Cincinnati Grain Co. vs. Louisville & Nashville Railroad Co.*, 142 Southwestern Reporter, 374) that nothing more was to be done by the consignor until the car was transported from the elevator to the south-bound track. The words "south bound" in the bill of lading had a definite meaning according to the understanding of the parties. It referred to a definite point and was well understood. That the name of the consignee was not given was immaterial. The bill of lading obliged the carrier to take the car to the point indicated. It was not material that the distance was only a mile or a mile and a half. The principle was the same whether it was one mile or 100 miles. Nor was it material that, when the car reached the point indicated, it was to be routed to another point. The car was in the possession of the railroad company as a carrier when it received it for transportation. The fact that this was not the final destination of the car did not affect the nature of the contract.

It was to be observed that by the written contract it was specified that that railroad company received the property and agreed to carry it to its usual place of delivery at the destination indicated; that is, the south-bound track. It was also to be observed that by one of the stipulations on the back of the contract it was provided that the carrier should be liable for any loss of the property or damage thereto, except as therein provided. If the carrier had carried this car of wheat to the south-bound track and it had been destroyed while waiting there for the consignor to route it to its final destination, a different question would have been presented. But this car was received for transportation to a point under a written contract by which the railroad company as a carrier assumed liability for it, and the property was lost in its possession and before it was carried to the point indicated. The company was therefore liable.

No Implied Warranty of Feed Stuffs.

In an action brought to recover a claimed balance of \$3,191 for feed stuffs for animals, the second plea of the defendants was in substance that, said feed stuffs were sold to the defendants to feed to their mules, with the belief that the same was sound, wholesome feed; that said feed stuffs were not wholesome, sound, etc., but were decayed, rotten, unfit, and unwholesome feed for said mules, and were in such rotten condition that when fed to said mules they made said mules sick, causing the death of six of them, etc. The third plea of the defendants set out that the feed stuffs were not sound and wholesome feed for their animals, but "on the other hand, were so decayed, damaged and rotten as to be unfit for the purpose for which same were sold, unfit to be fed to said mules, and unfit to be fed at all, and were worthless and of no value."

The Supreme Court of Mississippi says (*Dulaney vs. Jones & Rogers*, 57 Southern Reporter, 225) that it was argued with much ability that an implied warranty of soundness arises only in cases where the food sold is for human consumption; and after a careful consideration of the question the court's conclusion is that, according to the weight of authority in this country, there is an implied warranty of soundness in the case of the

sale of provisions intended for human food but with food for other purposes there is no implied warranty of soundness. This is put upon the grounds of public policy, the controlling reason being the regard for human life and for human health.

But the court does not know of any law, and counsel failed to cite it to any authority, that holds that a person is liable when he buys articles that are worthless and of no value. The law does not imply a promise upon the part of the purchaser to pay for goods that are worthless and of no value. In such cases there is a total failure of consideration. The court construes the third plea to be equivalent to a plea of total failure of consideration.

If the articles purchased are worthless and of no value at all, the purchaser is not required even to return or to offer to return them. This principle, of course, is not applicable in a case where a person buys "a pig in a bag or a cat in a sack." In such cases he must stand upon his contract; but where he purchases things for consumption, either for human food or for use of live stock, he cannot be made to pay for those things which are worthless and of no value.

The Capital Investment Co. of Chicago was fined \$10,000 by the Federal Court for conducting a bucket-shop. Those fined were: Richard I. Marr, president, \$5,000; Richard H. McHie, secretary, \$2,500; James F. Southern, director, \$2,500.

The Fort Wayne Oil and Supply Co. of Fort Wayne, Ind., which filed a mechanic's lien against the Farmers' Elevator Co. of South Whitley, Ind., recently released the same, stating that the lien was filed through an error of one of its clerks.

The Ohio Hay and Grain Co. recently filed suit against the Isaac Harter Milling Co. of Fostoria and Toledo, Ohio, suing for \$124, asking \$70 of that amount as damages for shrinkage in kiln-dried corn purchased from the defendants and the remainder as demurrage on the freight shipments involved. The court returned a verdict for only the \$70 asked for the shrinkage damages.

George Triphagen of Sunfield, Mich., has filed suit against John H. Palmer, asking for an injunction to restrain Palmer from engaging in the elevator business. The plaintiff alleges that Palmer violated his agreement to keep out of the elevator business for two years, following the sale of the business. It is claimed that Palmer has entered the business in the name of his minor son, who has been named as one of the defendants.

The Eighth District Federal Court of Appeals at St. Paul recently upheld the Eastern Missouri District of the United States Circuit Court in a fine of \$3,500 which was assessed against the Merchants' Stock and Grain Co. of St. Louis and its president, Francis J. Miner, and general manager, Patrick A. Stephens. The fine grew out of litigation begun more than two years ago, when the company was fined for contempt in violating an injunction against its furnishing stock quotations of the Chicago Board of Trade to 400 Western cities.

D. W. Wilkinson & Bro. of Jackson, Miss., have brought suit against the Clement Grain Co. of Waco, Texas, in which the plaintiff seeks to compel the defendant to deliver a shipment of oats which were billed to the firm at Jackson. It is claimed that the oats were shipped according to agreement but were delayed in transit. The Texas firm mailed a sight draft to the Jackson firm but as this reached Jackson before the consignment of oats, payment was refused until the arrival of the car. The bank returned the draft, whereupon delivery of the oats was refused by the defendant.

Charged with an attempt to obtain insurance money and also to escape the payment of storage charges on a quantity of wheat, Henry Goddard, a farmer near Tekoa, Wash., and James Breen, an employe of Goddard, have been arrested for the alleged burning of the Kerr-Gifford Warehouse at Warner, Wash., and for attempting to burn the Northern Grain Co.'s warehouse at Tekoa, where Goddard had stored considerable wheat. It is charged that Goddard had stored between 5,000 and 6,000 bushels of wheat in the house at Warner, which was totally destroyed, some of the wheat having been stored in the warehouse for more than eight years. The house at Tekoa failed to burn.

The National Elevator Co., Ltd., of Winnipeg, Man., was awarded \$450 damages against the Manitoba Commission Co., following a case which arose out of the action of the Grain Standard Board in lowering the standard of wheat. The plaintiff claimed that the defendant contracted to take 10,000 bushels of wheat, but when the grain was sent refused to accept it, while the defendant company maintained that the grade of wheat tendered was of an inferior quality to that for which the contract called and that since the contract had been made the grade of wheat had been lowered by the Grain Standard Board. It transpired that the grain was delivered and accepted, nothing being said about the quality; so judgment was accorded the plaintiff.

APPEAL ARBITRATION DECISIONS.

The following arbitration decisions by the Tri-State Arbitration Committee (Texas, Oklahoma and Kansas) are kindly furnished by Secretary Gibbs of the Texas Association:

SHIPMENT AFTER EXPIRATION OF CONTRACT.

J. H. Shaw of Enid, Okla., vs. Wichita Mill and Elevator Co., of Wichita Falls, Texas.—[L. G. Belew and H. Work, committee.]—This cause of action comes to us appealed from the decision of the arbitration committee of the Grain Dealers' Association of Texas.

We find from the evidence that on January 19, 1912, through telegraphic correspondence, J. H. Shaw of Enid, Okla., sold to Wichita Mill & Elevator Co., of Wichita Falls, Texas, one car No. 2 hard wheat, delivered group one at \$1.13 per bushel, ten days shipment. We find that on the 31st day of January the aforesaid Wichita Mill & Elevator Co. wrote J. H. Shaw, using the following language: "If you have not shipped the car of wheat in accordance with the purchase you had better take the matter up with us before billing out."

The aforesaid J. H. Shaw received this letter on the 2nd day of February, and shipped the car of wheat on the same date; all of which was not within the life of the contract, and according to Rule 7 of Texas Grain Dealers' Trade Rules, it remained in the power of the purchaser *only* to extend the contract. And inasmuch as the aforesaid J. H. Shaw had positive instructions if car had not been shipped as per purchase better not ship until he communicated with the Wichita Mill & Elevator Co. This we regard as sufficient notice to J. H. Shaw not to ship the car if not within contract time, and it was absolutely optional with aforesaid Mill & Elevator Co. to extend the time of shipment, if car had not been shipped.

We therefore decree that the Wichita Mill & Elevator Co. was acting truly within their own rights in refusing the car. And we hold that the decision of the arbitration committee of the Texas grain dealers be affirmed.

Mr. Shaw, a member of this board, agreed that this cause be tried before the other two members of the Tri-State Board.

We also decree that the arbitration fee of ten dollars be returned to Wichita Mill & Elevator Co., and that the expense of this arbitration be born by the aforesaid plaintiff, J. H. Shaw.

HANDLING OFF-GRADE AND SHORT WEIGHT.

J. C. Hunt Grain Co., Wichita Falls, Texas, vs. W. L. Perkins, Oklahoma City, Okla.—[J. H. Shaw, L. G. Belew and H. Work, committee.]—This cause is appealed from the Oklahoma Grain Dealers' board of arbitration by J. C. Hunt Grain Co. of Wichita Falls, Texas. The evidence adduced before the Tri-State Board shows the facts to be: That W. L. Perkins sold to J. C. Hunt Grain Co., one car of good, sound, dry, snap corn during the month of January at 59 cents f. o. b. Hobart, grades and weights guaranteed within 2 per cent at destination. The J. C. Hunt Grain Co. ordered the car shipped to Vernon, Texas. Perkins did not confirm this sale, but made the shipment in accordance with the contract as to time.

On January 26, J. C. Hunt Grain Co. wrote W. L. Perkins and advised him that the corn was somewhat in bad order, and that he (Hunt) would handle the car best he could unless he had contrary instructions from him (Perkins), and that he did not think there would be more than a small loss, if any, on account of the grade. We find no authority given by Perkins to Hunt to handle the car of corn in this way. This sale was made f. o. b. Oklahoma, and therefore Oklahoma Trade Rules must apply in consideration of the merits of the aforesaid litigants.

We do not find from the evidence presented that there had been a sufficient volume of business between Hunt and Perkins, as per the contention of the aforesaid J. C. Hunt Grain Co., where they forwarded the car from Vernon to another destination, by which a custom would be established that would warrant this board in setting aside Rule 17 of the Oklahoma Grain Trade Rules, and how that the Hunt Grain Co. should have had authority from Perkins to handle the car of corn.

We hold that W. L. Perkins did guarantee the weights within 2 per cent of invoice, and that he should be held to protect the aforesaid Hunt Grain Co. as to loss in weight. And as the corn was invoiced at 35,285 pounds, and as destination sworn weights show that the car weighed 32,875 pounds, making a net loss of 1,710 pounds, or 23½ bushels, after allowing the 2 per cent, we find 23½ bushels at 59 cents equals \$13.95, which amount the aforesaid W. L. Perkins is ordered to pay to J. C. Hunt Grain Co., and the deposit fee of \$10 made by J. C. Hunt Grain Co. is returned, and the expense of this arbitration charged to W. L. Perkins, from the fact that in the hearing by the Oklahoma Board the aforesaid J. C. Hunt Grain Co. received no award, and we render in favor of the J. C. Hunt Grain Co. in this hearing.

FIRES-CASUALTIES

The Dolder Bros. Elevator at Pioneer, Iowa, was burned Oct. 22.

The Farmers' Elevator at Fairdale, N. D., was destroyed by fire, Nov. 5.

The Farmers' Elevator at Hawarden, Iowa, was partially destroyed by fire recently.

The elevator at Cowden, Ill., operated by O. R. Hawkins, was destroyed by fire, Oct. 16.

The elevator of the Charleston Milling Co. at Charleston, Mo., was damaged by fire, Nov. 5.

The elevator of the Rea-Patterson Milling Co. at Coffeyville, Kan., was damaged by fire Oct. 17.

The roof of Darnell & Spence's elevator at Waynesville, Ill., was damaged by fire recently.

The Farmers' Elevator at Dalton City, Ill., was destroyed by fire, Oct. 31, entailing a loss of \$10,000.

One of the elevators at Beach, N. D., collapsed under the strain of an unusual weight of grain recently.

The Cleveland Warehouse at Corcoran, Cal., was destroyed by fire recently, the loss amounting to \$150,000.

The plant of the H. W. Bishop Grain Co. at Boothbay Harbor, Me., was badly damaged by fire and water recently.

The plant of the United States Grain, Flour & Feed Co. at St. Joseph, Mo., was damaged by fire to the extent of \$25,000 recently.

One side of the Hunting Elevator at Sexton, Iowa, collapsed recently, causing the whole building to incline heavily in one direction.

Carl W. Nelson, manager of the Swan Elevator at Alden, Minn., caught his clothes in a shaft in the elevator recently and was quite seriously injured.

The grain warehouse of Loveless & Wall at Plano, Texas, was struck by lightning, Nov. 6, and totally destroyed by fire. The loss on the building was \$1,500, partially insured.

Luke Chupek, watchman for the Northwestern Yeast Co. at Chicago, fell into a grain pit in the company's elevator, Oct. 27, and was suffocated before the body could be recovered.

The Merchants' Elevator at Groton, S. D., was damaged by fire recently. There were between 10,000 and 12,000 bushels of wheat and 1,600 bushels of flax in the building at the time.

The grain and hay shed of H. H. Davis at Waltonville, Ill., containing about 200 tons of hay and 1,200 bushels of wheat, was burned recently. The loss was \$4,000 and the insurance \$600.

The plant of Edmondson, Brogdon & Co., grain dealers at Buford, Ga., was damaged by fire and water when fire swept a portion of the town Oct. 22. The loss is fully covered by insurance.

James Miller was badly injured in the Goodrich Bros. Hay and Grain Elevator at Winchester, Ind., when he slipped from the boiler on which he was working, breaking his left arm and two ribs.

Alf. Clement, an employe in the elevator at Ethan, S. D., caught his finger in the gearing of the gasoline engine recently, and the member was so badly crushed it was necessary to amputate it at the first joint.

Graves & Hurburgh's elevator at Weston, Ill., was destroyed by fire, Oct. 20, with 30,000 bushels of grain. The fire is believed to have originated from a spark from an engine. The loss was approximately \$40,000.

A freight train on the Jamestown & Northern branch of the Northern Pacific, heavily laden with grain, was ditched near Pingree, N. D., recently. Six cars of wheat were demolished and the grain was spilled along the track.

Fire destroyed the grain elevator and warehouse of the Kansas City Seed and Grain Co. at Kansas City, Mo., Oct. 28, entailing a loss of \$5,000 on the building and \$15,000 on the stock of grain. The loss was covered by insurance.

An attempt was made to fire the Union Farmers' Elevator at Wheatland, Ind., recently. A sack of cobs which had been saturated with oil was discovered burning in the top of the building but it was thrown out before much damage was done.

An elevator, the property of the Belfast Milling Co. of Belfast, Tenn., containing about \$10,000 worth of grain, was destroyed by fire recently. The building was a frame structure and was insured for \$2,500 and the grain was insured for \$5,000.

Gilbert Gunderson, manager of the Dakota & Anthony Elevator at Keith, N. D., narrowly escaped death when he was caught by a set screw on the main shaft of the machinery under the elevator. Mr. Gunderson was soaping the pulley when his sleeve caught on the screw and he was whirled around at high speed. An hour later he was found unconscious beneath the shaft, seriously bruised and his clothes in shreds. He was taken

to a hospital at Devils Lake, N. D., where it is thought he will recover, although he is partially paralyzed.

Fred Rheingans, who operates the elevator of the Farmers' Produce Co. at Chippewa Falls, Wis., caught his foot in the elevator in the warehouse of the Clark Grain & Fuel Co., Nov. 4, and suffered quite a painful injury although no bones were broken.

E. A. Brown's elevator at Bemis, S. D., was destroyed by fire recently, together with considerable grain. The loss on the house was total, as the insurance covered the grain only. This is the second time that Mr. Brown has lost his elevator by fire, but he plans to rebuild.

The elevator at Rouena, near Sleepy Eye, Minn., was destroyed by fire Oct. 16. The house was full of grain, while the coal sheds with a stock of coal were also consumed. The origin of the fire is unknown. The manager discovered the fire on returning from his dinner at noon.

Fire destroyed the Scroggs Elevator at Hurley, S. D., Oct. 28. Manager Ed. Lambertson built a fire in the office stove and went home to breakfast; when he returned the office was ablaze. The loss on grain was estimated at \$4,000, while the building was worth about \$4,500. Insured.

The elevator at Rumpler, two miles east of Ogden, Ill., burned Oct. 15, together with 15,000 bushels of grain. The origin of the fire is not known. The loss amounted to about \$12,000, partially covered by insurance. The elevator was owned by the Zorn Grain Co. of Peoria.

The plant of the Standard Warehouse Co. near Kansas City, Mo., was destroyed Oct. 21, with a loss of \$25,000. Spontaneous combustion was given as the cause of the fire. Fifteen cars of hay were consumed. The Carlisle Commission Co. owned the property. Insurance fully covers the loss.

While at work in an elevator shaft in the Minnesota and Annex Elevator, Chicago, James Fowler was injured fatally. Not knowing that Fowler was at work in the shaft in the basement, the operator of the elevator descended when he heard a cry but the man was crushed before the lift could be stopped.

The Winter-Truesdale-Ames Elevator at Glass-ton, N. D., formerly known as the Minneapolis & Northern, was destroyed by fire Oct. 16, together with about 12,000 bushels of grain. The cause of the fire is unknown but is believed to have been of incendiary origin. The loss is fully covered by insurance.

Fire of unknown origin totally destroyed the elevator at Chatham, Ill., operated by the Chatham Elevator Co., Oct. 15. The building contained about 10,000 bushels of grain and the loss amounted to \$25,000. The stockholders of the company are considering plans for the reconstruction of the house.

John Buell, an employe of the G. D. Sutton Seed Corn Co. of Geneseo, Ill., was injured in the company's drying and storage house Oct. 21, when a section of the third floor gave way, precipitating a large quantity of corn in crates to the floor beneath, where Buell was at work. Other employes promptly extricated him but he was badly bruised.

Fire of incendiary origin completely destroyed the Farmers' Elevator at Mattoon, Ill., Oct. 22. The fire started in the corn hoist about nine o'clock in the evening and was soon extinguished by the fire department, but two hours later the elevator was again on fire. Three months ago an attempt was made to fire the house but without success. The elevator was valued at about \$15,000, with \$10,000 insurance.

Jerome Oscar Van Mol, youngest son of H. Van Mol, slipped and fell while playing in the elevator at Swan Lake, Man., and caught his sweater in the shaft. The children who had been playing with him did their utmost to pull him away, but he was whirled around for nearly five minutes and when at last released was unconscious. He was carried home, where he died a few minutes later in his mother's arms.

Arthur Jones narrowly escaped death in the elevator of the Jackson Grain Co. at Williamsburg, Iowa, recently. While working in the basement of the building near the shaft that drives the elevators, his clothing was caught in a set screw and in an instant he was wedged against a heavy grain spout that runs close to the shaft, while his clothes were practically all torn from his body. He escaped with a few bruises.

The elevator at Farmington, Ill., owned by Buckley, Pursley & Co. of Peoria, was destroyed by fire recently. It is thought that the blaze originated from a spark from a switch engine as the fire was discovered burning on the roof of the old structure. There were about 4,000 bushels of oats in the building which had a capacity of 18,000 bushels. The company carried about \$4,000 insurance on the house. It was an old landmark, having been constructed in 1865.

TRANSPORTATION

The new Eastern differentials ruling of the Commerce Commission goes into effect on Jan. 1.

The car shortage at Buffalo at Nov. 1 was at least 1,500; and the elevators are taking into store twice as much grain daily as they can reship.

The proposed increase in the transcontinental barley rate of 3c California, Nevada and Utah to Minneapolis and Northwest has been suspended until April 29.

Four lake boats were chartered on Nov. 1 to hold grain through the winter at Port Huron and Erie at 3½ to 3½ cents. Rates at Buffalo are on the basis of 4 cents.

Effective Nov. 8 the C. P. Ry. has made a new tariff on grain shipments from western Canadian points to Duluth and Minneapolis. These rates are the same as to Ft. William.

Rates for grain transportation from the head of the lakes to Buffalo, which had been dormant at 2 cents for some days, suddenly grew strong on Nov. 6, when they were quoted at 3 cents strong.

Replying to a rumor of advance in elevator rates at Kansas City, Mo., the Missouri Board of Railway and Warehouse Commissioners has notified the Kansas City elevators that there can be no advance in rates of storage of grain except on January 1; that no consent would be given for an advance.

The Waterways Navigation Co. of St. Paul, Minn., has been organized with a capital stock of \$10,000,000 for the purpose of operating power boats and barges on the Mississippi River from St. Paul to New Orleans. The company says it intends to operate the barges in fleets of ten, each barge having carrying capacity of 1,000 tons.

The Omaha Grain Exchange has filed a complaint against the Santa Fe, the Great Western, St. Paul and practically all the roads entering Kansas City charging the roads with erecting grain elevators in Kansas City and vicinity and renting them to grain companies at unreasonably low rentals, thus giving Kansas City an advantage over Omaha as a grain center.

According to the American Railway Association bulletin, the number of idle freight cars dropped to 17,289 in the two weeks ended Nov. 2, while the shortage rose from 54,389 to 67,270, making a net shortage of 49,981 cars, compared with 31,579 two weeks ago and 17,793 four weeks ago. Thus the situation has become decidedly worse, and the outlook is not encouraging as far as the railroads are concerned.

Effective November 19, the C. & E. I. R. R. has established through rates on corn, grits, corn flour, corn meal, gluten feed, gluten meal and starch to Milwaukee and Racine, Wis., and Waukegan, Ill., from its stations in Illinois, north of and including Danville, St. Elmo and East St. Louis and from the four stations in Indiana on the Milford and Rossville branches, namely, Freeland Park, Pence, Finney and Judyville. These rates are made up on the basis of the Illinois "Proportional" rates, or specifics, to Chicago, plus 3 cents per 100 pounds, and apply *via* Chicago with transit privilege.

The J. C. Lysle Milling Co. of Leavenworth has begun a suit against the C., B. & Q. Ry. Co., demanding \$1,000 compensation for cleaning and preparing cars tendered for shipment of flour. An agreement, it is alleged, was made between the railway company and the mill that the former should pay the cost of cleaning the freight cars. The agreement was kept for two years. Then, the mill claims, the railroad sent dirty cars. The case will be tried by the Kansas State Railroad Commission in January. More than a hundred mills in Kansas are waiting for the outcome of the case and other claims may be filed.

A committee of the American Railway Association has gathered data from 143 companies operating 195,049 miles of road in regard to the cost of complying with existing State laws fixing the number of men in a train crew and the estimated cost of complying with the proposed Federal law on the same subject. The returns show that it would cost the railroads a total of \$13,395,617 a year to comply with such laws, or the equivalent of 5 per cent interest on a capital expenditure of \$267,912,355. The committee adds that no additional safety will be provided for the public or employes, but that in many instances the operation of the trains will be less safe by reason of the multiplication of useless employes.

In answering a complaint at New Orleans, before the examiner of the I. C. C., against advancing the car load minimums on snap corn from 24,000 to 40,000 lbs., the railroad men went into the average size and cubic capacity of the cars, asserting that only about 3 per cent of their equipment is of 23-foot box cars, the others being 26 feet in length and over. The 23-foot box cars could be loaded with 40,000 pounds minimum by using due care, and in no instance would it be possible to miss loading a minimum of 40,000 pounds if the cars 36 feet and

over were loaded to anything like a full capacity. Statistics were read showing that in many instances cars were loaded with snap corn up to 55,000 pounds, and that in others ear corn was loaded beyond a 60,000-pound minimum. The railroads, therefore, contended that the 40,000-pound minimum was fair and reasonable, especially in view of the fact that there is a shortage of cars threatened on all lines, and a movement is being made to load all equipment to fullest capacity in order to get the maximum efficiency in handling.

CAR SHORTAGE AND DEMURRAGE.

Railroad men continue to argue that an increase of the demurrage per diem is the only cure for car shortage. The point is made that while all carriers have demurrage rules with rates thereunder usually amounting to \$1 per car per day, there is no limit specified as to the time a car may be detained. One of the first reforms in the existing rules it is urged should be a stipulation of the time a car may be detained under any circumstances, with the provision that regular storage rates be imposed after such time expires. Such a system would reach directly that class of consignees who are not trying to bring about a prompt release of cars and who are not seriously affected by the demurrage charge. It would ultimately wipe out that class of shippers who use the cars for storing and it would be more equitable than the suggested system of graduated demurrage charges of \$1, \$1.50, \$2, and \$2.50 imposed after the lapse of certain intervals, because it would give to the carrier an amount more nearly approaching what the owner would have to pay for the storage of the same goods in warehouses. In the vicinity of any great city hundreds of cars can be counted on sidings at any time, held up because of the disposition of the shipper's consignee not to unload promptly upon arrival or within the free time of 48 hours.

ALLOWANCES FOR DEFICIENCIES.

The London Corn Trade Association has announced the following new scales of allowances for deficiencies in guaranteed natural weights to come into force with the revised contract forms issued on July 1, 1912, for grain discharged in United Kingdom ports:

Oats.—When the guarantee is 40 lbs. English per bushel (or its equivalent) or more, and the ascertained weight is less than 40 lbs., an allowance to be made on the basis of 3d. per lb. deficient weight. When the guarantee is less than 40 lbs., any ascertained deficiency to be allowed for on the basis of 1½d. per lb. deficient weight. When the guarantee is over 40 lbs. and the ascertained weight does not fall below 40 lbs., any ascertained deficiency to be allowed for on the basis of 1½d. per lb. deficient weight.

Rye.—1¼ per cent on contract price for the first lb. per bushel short; 2½ per cent on contract price for the second lb. per bushel short; 3½ per cent on contract price for every further lb. per bushel deficiency. (Fractions to be calculated.)

Wheat Shipped from Danubian, Black Sea, and for Azoff Ports.—1. One per cent shall be allowed off the natural weight guaranteed at the time of shipment for decrease in natural weight during the voyage. Any deficiency in the guaranteed natural weight beyond the said 1 per cent shall be allowed for off the contract price on the following scale—viz.: Where the deficiency does not exceed 2 lbs. per bushel: For every pound per bushel up to 2 lbs., 1¼ per cent. Where the deficiency exceeds 2 lbs. per bushel, but does not exceed 4 lbs.: 1¼ per cent per lb. per bushel for the first 2 lbs. and 2 per cent per lb. per bushel for the third and fourth pounds. Where the deficiency exceeds 4 lbs. the allowance shall be determined by arbitration. Fractions of 1 lb. counting ounces in proportion. No deduction shall be allowed from a natural weight guaranteed at port of discharge. 2. Where the natural weight is guaranteed at time of shipment within a margin (as for example 61 to 62 lbs.) the allowance for deficiency shall be computed from the minimum weight of the margin, and a deduction of 1 per cent shall be made from that weight in accordance with rule 1. 3. If natural weight be guaranteed in kilos. per hectolitre, same shall be converted into English pounds per bushel, reckoning 2.90789 hectolitres equal to an imperial quarter, as per table published by the London Corn Trade Association. 4. The natural weight of the sound portion of the cargo or parcel shall be taken as the natural weight of the whole. 5. In every case in which an allowance for inferiority in quality is claimed, the arbitrators shall, in determining the same, take into consideration the allowance (if any) already made for deficiency in guaranteed natural weight.

The steamer Willis L. King at Fort William loaded 425,000 bus. of wheat on Nov. 2, being the largest grain cargo ever carried on the lakes.

New Orleans reports exports in October as follows: Wheat 2,135,282.10 (of which 81,000 bus. went to Latin America), and 104,640 bus. of corn and 63,625 of oats, all to Latin America.

ASSOCIATIONS

Sec'y Gibbs of Texas has returned to his desk at Fort Worth after several weeks' vacation in California.

Sec'y Gibbs announces the following applications pending for membership in the Texas Association: C & M. J. Strong, Wellington, and Barkemeyer Grain Co., Floydada.

A meeting of the Ohio Hay Shippers' Association met at Bucyrus on October 24 with a good attendance of both shippers and farmers. Two sessions were held, and matters of mutual interest and concern were talked over.

Sec'y Courcier gives notice that directors of the Chamber of Commerce and Business League of Mobile, Ala., have adopted Uniform Grade Rules of the National Association in their entirety and give assurance that an effort will be made to secure the early adoption of the Trade Rules of the Association.

The following are new members of the National Association since last report: Bonfield Grain & Lumber Co., Bonfield, Ill.; Seth Catlin, Jr., and A. S. Heathfield, Boston; W. W. Willis, Clarksburg, W. Va.; Walter A. Bennett, The Sheets Bros. Elevator Co., and The Star Elevator Co., Cleveland O.; Jordan & Montgomery Co. Indianapolis; J. J. Wade, Memphis; Thomas M. Blake, New York; Manchester Mills, Inc., Richmond, Va.; Bert H. Lang, St. Louis; Pilliod Milling Co., Swanton, O.

The Tri-State Grain Producers' and Shippers' Association, Secretary Riddle, Lima, says: "Our Association has found it a good thing to maintain a scale inspection and repair service. For the encouragement of other local associations, we may say that our scale inspection and repair service is giving the millers and elevator operators of this territory a very efficient service and that it is costing less than half the regular cost. Besides, this service is earning for our Association about \$20 per month." Mr. Riddle incloses letters from half a dozen patrons of the service, who speak of it in high terms.

In the campaign for new members of the National Hay Association Secretary Taylor reports the following credits for 51 members: J. Vining Taylor, Secretary, 27; J. D. Cole, Director, Kansas City, Mo.; 2; Harry Winer, Chairman State Vice-Presidents Chattanooga, and E. Wilkinson, President, Birmingham, Ala., two each, and the following one each: H. W. Smith, Buxton, Kan.; W. L. Harris, Vice-President, Inola, Okla.; Probst & Kassebaum, Indianapolis; George Lopez, State Vice-President, Lamar, Colo.; Thomas Clinton, State Vice-President, Buhl, Idaho; J. N. Russell, State Vice-President, Kansas City; Fred Sproul, Eldorado, Kan.; W. C. Nothern, State Vice-President, Little Rock; J. V. Craig, State Vice-President, Washington; A. J. Benoit, Assistant State Vice-President, Mt. Johnson, Can.; and H. P. Pillsbury, Washington.

The following receiving firms have become members of the Illinois Association since Bulletin No. 9 was issued: Adams Grain and Provision Co., Charlotte, N. C.; A. Bender, 415 4th National Bank Bldg., Cincinnati, Ohio; W. T. Bradbury Co., Bellflower, Ill.; Burns Grain Co., 722 Chamber of Commerce, Buffalo; the Chapman-Doake Co. and Conner & Miller, Decatur, Ill.; Ferguson & McConnel, Danville, Ill.; C. E. Fletcher, Royal, Ill.; C. A. King & Co. and the Raymond P. Lipe Co., Toledo; McLean County Grain Co., Bloomington, Ill.; B. E. Morgan, Buckley, Ill.; R. P. Ransom, Memphis; S. M. Ratcliffe, Buffalo; Richardson Bros., Philadelphia; Roberts & Gullett, Roberts, Ill.; W. A. Rundell Co., Toledo; C. H. Ruple & Co., Galton, Ill.; Southworth & Co. and Toledo Grain and Milling Co., Toledo; Turner Grain Co., St. Louis; the Union Grain and Hay Co., Cincinnati; U. S. Feed and Grain Co., Memphis; West Bros. Grain Co., Thawville, Ill.; John Wickenhisser & Co. and J. F. Zahm & Co., Toledo.

ILLINOIS ASSOCIATION SCALE INSPECTION.

The scale committee of the Illinois Grain Dealers' Association held a meeting at the St. Nicholas Hotel, Decatur, on Oct. 19, it being the end of the year for which Clay Johnson was employed as Official Scale Inspector for the Association.

Those present were W. M. Close, Chairman, Illinois; John Wiemer, San Jose, and R. K. Byerly, Catlin, composing the committee; also Lee G. Metcalf, President of the Association, Illinois; S. W. Strong, Secretary, Urbana, and Clay Johnson, Inspector, Decatur.

The Inspector made his annual report for work done, which showed 483 scales tested, repaired or adjusted, and put in perfect working order as follows: 307 wagon scales, 122 hopper scales, 27 automatic scales, 14 railroad scales, 5 dormant scales and 8 flour scales. Of the wagon scales, 44 were refitted throughout and rebuilt. The whole expense for work done on the 483 scales was \$2,035.08, or an average of \$4.19 per scale.

The work for the scale inspector continues to in-

crease; and recognizing that one expert could not any longer take care of the business, the committee gave authority to the President and Secretary to employ another scale expert.

From reports received by the committee, no action of the Association has been more generally approved than the inauguration of the scale inspection feature. Shippers have found out that it pays to have their equipment in perfect condition, both with the farmer and with the railroad. The producer is vastly more satisfied when he sees a certificate annually posted on the scale beam that this scale has been inspected by a competent and expert official, and the railroads pay claims much more promptly which are accompanied by the information that the scale that weighed the grain into the car was inspected by an official expert within a short time.

EFFECT OF CAR SHORTAGE.

At meeting of local grain dealers, members and non-members of the Illinois Grain Dealers' Association, held in Champaign, Oct. 13, the car situation on all the railroads in central Illinois was fully discussed; and a committee was appointed consisting of William Murray, H. T. Walton and W. P. Foote, to prepare suitable resolutions to be presented to another meeting to be held at a later date, in relation to the subject. Said committee prepared the following statement and resolutions which cover the case and voice the ideas of the grain dealers of this section of the state:

Whereas, Practically every country grain dealer has lost considerable money during the past few months from the fact that the various railway companies did not furnish enough cars to load out grain which dealers had bought, so as to permit the shippers to fill their contracts, and because of this their contracts were cancelled by receivers and the grain left on their hands with the market price much lower than when the grain was contracted; and that this same condition had similarly affected them in the past at numerous times and the indications are that they will have the same adverse conditions to contend with until some provision is made to compel the railroads to make adequate provision for the handling of grain; therefore be it

Resolved, That we appeal to all members of the grain fraternity—the Illinois Grain Dealers' Association, the Farmers' Grain Dealers' Association, the Railway and Warehouse Commission, and the legislature of the state of Illinois, to exert their utmost effort to right the wrong and injustice of such treatment as the grain business has received from the railways in the matter of furnishing cars when ordered and the movement of grain laden cars after same were loaded; and be it further

Resolved, That the board of directors of the Illinois Grain Dealers' Association be requested to take immediate steps to instruct its legislative committee to prepare and have presented at the meeting of the next General Assembly of the State a suitable reciprocal demurrage bill, which will enforce upon the railroads like penalties for failure to furnish and move cars as now exacted from the shipper; and be it further

Resolved, That the secretary of the Illinois Grain Dealers' Association is requested to send a copy of these resolutions to every member of the Association and at the proper time to secure through the members of the Association, petitions signed by the farmers of the State, who raise the grain and who would receive great benefit from such a reciprocal demurrage law; and be it further

Resolved, That preceding the coming election, we pledge ourselves to present the question of a reciprocal demurrage law to all candidates for election to the State legislature, and urge upon them the necessity of such enactment; and be it further

Resolved, That we each and all hereby pledge ourselves to support the efforts, by whomsoever made, to secure the passage of such legislation as will remedy once and for all time the injustice now suffered by every grain handler in the State.

Kansas has gone into pop-corn in Shawnee County, where 200 acres are reported this season, with \$20 to \$45 per acre net to the grower.

Extensive improvements, that will cost when completed \$1,500,000 or more, have been commenced by the Albert Dickinson Co. on its property at Thirty-fifth Street and the Illinois and Michigan Canal, for the construction of a warehouse and elevator to be of reinforced concrete and steel construction, around which will be erected the various buildings for an immense plant.

The Chicago Board of Trade Transportation Department gives notice that the C. & O., C. I. & L., C. T. H. & S., Big Four and M. C. roads east and the Santa Fe, Q., St. Paul and Rock Island west have filed tariffs effective today, Nov. 15, containing a rule providing that on shipments of grain passing through on direct transfer, the minimum carload weight to be applied east of junctions with Eastern lines will be the minimum carload weight charged west thereof, so that the originating road's minimum weight basis will be assessed through from point of origin to destination.

ILLINOIS AND MICHIGAN CANAL

At a meeting of the committee on waterways of the Association of Commerce recently, Joy Morton, president of the Morton Salt Company, describing recent navigation tests of the old Illinois and Michigan canal, and pleading for aid in securing a million dollar appropriation for this neglected waterway, said:

"Entertaining the belief that Chicago, the great central market, really had some natural advantages which might be utilized, the old canal steamer 'Peerless,' thirty-five years old and out of condition, was engaged for a trip to Muscatine, Iowa, loaded at our docks at Robey street, on the south branch, with 150 tons of salt on June 2, 1912, and sent without serious difficulty through the old canal into the Illinois river at La Salle, thence through the Hennepin canal to the Mississippi river, and her cargo delivered on the west bank of the Mississippi river on June 5.

"Since then we have resurrected a number of the other old canal boats, and put them in this trade. The youngest one in the bunch was launched in 1875. If they were new today they might, under present United States laws (which prevent the railroads from wiping out canal lines by ruinous rates), be able to compete with the railroads of 1875, but not with those of 1912.

"The possibilities of the Illinois and Michigan canal for cheap traffic are most surprising. There is at present water enough for the largest canal boat in existence from Chicago to Lockport; there is seven feet from La Salle to the Mississippi river via the Hennepin canal, and nearly or quite nine feet in the Illinois river at its average stage from La Salle to St. Louis.

"Only the sixty-three-mile link of the old Illinois and Michigan canal between Lockport and La Salle needs correction, and even in the old canal we found six feet of water or more, as a rule, with only a few short bars where the water is from four to five feet deep, some of which have already been cleaned out.

"In this stretch of old canal between Lockport and La Salle there are only nine locks, 17 by 104 feet. The locks on the Hennepin are 35 by 170 feet. The average amount of concrete in each of these Hennepin locks is only 2,000 cubic yards, and the total expense of putting in one was about \$7 per cubic yard.

"On the Illinois and Michigan canal there is an abundance of concrete material of all kinds, including cement, which can be cheaply transported by boat. Government engineers tell me that concrete can be placed in new Illinois and Michigan locks at less than \$5 per cubic yard.

"The thing to do is to immediately enlarge the nine locks, making them as large or larger than the Hennepin locks. Two of them might be cut out entirely and make a better canal. Then, with the old canal cleaned out to a depth of nine feet we could transport barges carrying 800 tons of freight from Lockport to the Illinois river, and send them through faster than the average movement of freight cars on American railroads.

"In former days the canal was supplied by water from feeders from the Desplaines and Fox rivers and the supply was frequently inadequate. These feeders are no longer necessary, there being an abundance of water from the drainage canal.

"In my judgment there is no canal in the world, sixty miles long, of as great potentiality as the Illinois and Michigan canal. It connects the Great Lakes and the Mississippi valley, via Chicago, and there is an abundance of water and an enormous traffic on both sides of it. It is worth more money than any sixty miles of railroad in the United States. It is one of the greatest assets of the state of Illinois. Every dollar that was expended on the old canal has been returned with interest and a half million dollars besides.

"The canal can be made the greatest factor for Chicago's protection as regards rates, particularly on heavy commodities; and I hope the legislature at its next session can be induced to make an adequate appropriation for enlarging the locks and aqueducts of the canal and cleaning it out to a depth of nine feet. This can be done by dredging and at a comparatively small expense in a single season. Then a canal steamer, towing three barges, will carry as many tons of freight as the largest freight train and at a fraction of the charge Chicago shippers are now paying."—Chicago Commerce.

Peoria reported the arrival there of ten cars of new corn on Oct. 27, or about 25 per cent of its receipts.

John Powers of Sterling, Ill., claims the "world's corn record" by showing an average of 205 bushels for ten acres.

Nearly 2,000 cars of grain, or practically 2,000,000 bushels, were checked into Minneapolis on Nov. 3 in reports from the railroads that embraced a three days' run.

Indianapolis dealers are feeling quite chesty about the following tabular showing of the growth of receipts in that market (bushels and tons, in case of hay):

	Wheat.	Corn.	Oats.	Hay.
1911.....	3,664,200	19,513,800	5,979,000	1,243
1910.....	2,179,000	15,169,000	7,801,500	1,210
1909.....	2,602,000	12,620,000	5,673,000	1,312
1908.....	2,223,000	11,681,000	4,147,500	1,193
1907.....	2,248,200	11,877,300	4,576,500	1,543
1906.....	1,463,400	9,261,000	1,845,000	1,297
1905*.....	847,650	8,439,300	2,457,500	729
1904*.....	645,000	8,003,500	1,501,250	963
1903.....	1,104,000	7,164,750	1,121,250	904
1902.....	1,707,500	5,979,250	1,387,500	822

*Short crop.

HAY AND STRAW

The hay crop in Gunnison County, Colo., has exceeded that of 1911.

A fourth crop of alfalfa for the season has been marketed at Emporia, Kan.

Hinckley Bros. have engaged in the wholesale hay business at Nashville, Mich.

Albert Todd & Co., hay dealers at Owosso, Mich., have increased their capital stock from \$12,000 to \$20,000.

James Billington of Vassar, Mich., has purchased the hay and produce business of Koch & Lowell at Millington, Mich.

The Valley Grain & Hay Co. of Fresno, Cal., has opened a branch yard at Fowler, Cal., where a warehouse and sheds will be built.

L. J. Ivey of Calexico, Cal., has made eight cuttings of alfalfa from his ranch during the past year, averaging nine and one-half tons to the acre.

Alfalfa growers in the vicinity of Vale, Ore., recently petitioned the Governor of the State of Oregon to declare a quarantine against Idaho and all other states affected by the weevil.

The G. H. Keeney Co., capitalized at \$1,000, has incorporated at Rising Sun, Ind., to deal in hay and grain. The directors are George H. Keeney, Andrew J. Brodie and Mabel Brodie.

The Board of Public Works at Springfield, Mass., has awarded the Prentiss Brooks Co. the contract for the municipal supply of hay, agreeing to pay \$21.50 per ton and \$20 per ton for rye straw.

A quarantine has been placed against shipments of alfalfa, alfalfa seed and colonies of bees into California from every county in the States of Utah, Wyoming and Idaho, as a precaution against the weevil.

The Hunter Land Co. produced 4.3 tons of Rhodes grass to the acre on its demonstration farm in Osceola County, Fla., this season. The grass may be cut three times, and it is said to increase with each cutting.

The quarantine which was recently placed on Utah alfalfa by the state horticulturist of Washington has been lifted because of lack of jurisdiction on the part of the Washington inspector to authorize such prohibition of movement.

It has been estimated that from 6,000 acres of land near Riverside, Cal., 50,000 tons of alfalfa will be harvested this season. Eight cuttings have been made and there may be two more. This year's production will be 1,250,000 bales.

The alfalfa crop in Louisiana was considerably damaged by unfavorable weather this season, but the growers are not discouraged for these conditions are said to be unusual and it is believed that the acreage of alfalfa for next year will be greater than for any previous year.

J. V. Taylor, secretary and treasurer of the National Hay Association, visited Peoria, Ill., recently where he held a conference with the hay men on the Board of Trade and Association of Commerce members relative to the convention that will convene in Peoria next year.

The acting British Consul-General at Odessa reports that the 1912 hay crop of European Russia must be considered a great success, as nearly 60 per cent of the hay-producing area yielded good results, both in quantity and quality, while a satisfactory crop was secured from about half of the remaining area.

The Kansas City Hay Dealers' Association is planning to erect a home of its own at Kansas City, Mo. It has been proposed that a four-story building be constructed, with show rooms on the first floor, a large trading room on the second or third floor, and that the remainder of the building be used for offices.

It is reported that a farmer in Leon County, Fla., has invented a machine with which to dry, or cure, hay. He uses a process similar to that employed in drying lumber in a kiln. It is claimed that hay undergoing this process retains its original odor and color and can be stored and kept in Florida as elsewhere.

Secretary Wilson continues to bank on alfalfa, saying recently that, "Draw a line from the northern boundary of North Dakota down to the Gulf of Mexico—that's arid land. Up in Siberia our experts are getting alfalfa, and that hardy product we will put into the arid section. It will be the salvation of the arid country."

More hay balers have been used in Kansas this year than ever before in the state's history, says the Kansas farmer. A large part of the first crop of alfalfa was baled from the windrow and at once marketed. This was due to the unusually high price prevailing for alfalfa at that time. In those sections of the state—particularly in the southern part—where prairie hay is grown for market, the hay is being baled in about six of every ten fields. It is either loaded on the cars immediately after

baling, or stored for later marketing. Baling facilities storing and marketing.

It is said that the paille finne grass, which grows so abundantly on the humus prairies of southern Louisiana, is almost as rich in protein as alfalfa. It has not been available as yet for grazing or hay, as the land on which it grows is too wet to bear the weight of cattle or machinery. A mill is in operation in Terrebonne Parish which grinds 40 tons of meal daily, produced from this grass.

Reports from Oklahoma City, Okla., show that a total of 2,846 carloads of alfalfa were shipped out of the State previous to Oct. 20 as against 862 for the corresponding period last year, an increase of 1,984 cars. In the central and southern portions of the State there have been on an average five cuttings, two in excess of last year, while in the northern portion the average has been four cuttings.

G. E. Merrill, who is connected with the California State Commission of Horticulture, was sent to Utah recently to study the alfalfa weevil problem and in his report states: "From what has been said, the chances of keeping the pest out of California forever do not appear good. However, there is much consolation in the fact that we are isolated from the infested districts by a series of mountain ranges and deserts, and many years, we hope, may pass before our fields are affected."

The salt hay crop of Delaware Bay meadows will be about 12,000 tons this year, most of which, says the Norfolk *Virginian-Pilot*, will be twisted into fibrous ropes, used in core-making in the steel and iron foundries. Until recent years it was the custom to ship the hay loose on boats, each boat carrying from 40 to 60 tons, direct to the foundries or to shipping points in the cities, where it could be forwarded by train. A rope factory has now been put in operation and the hay is made into rope in a compact form for foundries in all parts of this country and Canada. The raw material sent in bulk sells for about \$10 a ton, which price is more than doubled on the finished rope.

In reply to the complaint of the Philadelphia Commercial Exchange that the Pennsylvania Railroad has discriminated against that city in favor of Baltimore in the matter of the free storage period allowed on hay and straw, the railroad company says: "It is not nor has it been the intention of the Pennsylvania Railroad to permit Baltimore shippers, whether they deal in hay, grain, straw or any other commodity, to enjoy any advantage over Philadelphia shippers, and so soon as the railroad has completed its negotiations the rules with reference to storage of hay and straw in effect at Baltimore and Philadelphia will be the same. The reduction from ten to five days in Philadelphia was made to hasten the unloading of cars so that the greatest possible number of cars might be available for other shippers."

HARDY ALFALFA IMPORTED.

Considerable interest has been aroused through the importation by the U. S. Department of Agriculture of some new, hardy varieties of alfalfa. Little, however, is generally known concerning the characteristics of these new alfalfas or the real purposes of their introduction.

In the search for hardy forms of common alfalfa (*Medicago sativa*) adapted to severe conditions of drought and cold, the potential value of closely allied species became apparent. A yellow-flowered species (*Medicago falcata*) found widely distributed throughout Eurasia, forms of which thrive on the cold, dry steppes of Russia and similar regions, seemed to be the most promising. For this reason persistent efforts were made to import many valuable forms of this species.

Medicago falcata, erroneously called "Siberian alfalfa," and for which there is no satisfactory common name, is characterized in general by its drooping habit, narrow leaves, and fine stems; but it is so variable that some plants may be readily mistaken for common alfalfa when not in flower. Very few of the forms possess true tap roots like the common alfalfa, but they have a branching root system by which new plants are produced. The flowers are yellow and the seed pods falcate or sickle shaped, hence its botanical name.

The Department of Agriculture has met with many difficulties in procuring seed in quantity, as it is not handled commercially and in no place is it produced in abundance. In spite of the scarcity of seed very thorough tests have been conducted both under cultivation and on unbroken sod at the Department's testing stations and in co-operative experiments at State stations. The results of these tests of the available forms of *Medicago falcata* indicate rather definitely that their chief value is for crossing with common alfalfa to produce hardy and drought resistant hybrid strains. At present the new alfalfas do not appear to be sufficiently productive to make them generally profitable under cultivation. Many of the forms are unquestionably very hardy and drought resistant and have already shown their value as stock for crossing with varieties commonly known.

One of the hardest, if not the hardest of our commercial strains, the Grimm alfalfa, probably originated through natural hybridization of *Medicago falcata* and common alfalfa. Grimm alfalfa is coming into very wide use in the Northwestern States. The new alfalfas have not yet been tested on the open range as fully as under cultivation. Although the results to date indicate their inability to maintain themselves except under very favorable conditions, the tests are nevertheless being continued with the hope of ultimate success in improving the range.

The experts of the Department do not believe that this yellow-flowered alfalfa in its unselected state is a crop for the farmer to test, even though seed were available. Three main considerations show that it is not likely to prove valuable under cultivation: (1) Most of its forms are not sufficiently erect to be easily harvested for hay; (2) it does not recover quickly after cutting and can not be expected to give more than one cutting during the season; (3) its seed habits are usually poor, the seed being scantily produced and shattering badly at maturity.

The Department of Agriculture is pushing the work of selection by hybridization of the best forms of this species as rapidly as possible, in the hope that valuable drought-resistant and cold-resistant strains may ultimately be established in general use.

Sec'y J. Vining Taylor reports the following new members of the National Hay Association since last listing: J. M. Gwaltney & Co., Norfolk; St. Joseph Hay and Feed Co., St. Joseph, Mo.; LeGrand & Burton, Norfolk; R. J. Earnshaw, Stewart & Co., A. A. Lithgow, John S. Cissell & Co., the G. W. Cissell Co., Wm. James & Son, Theo. Michael and Nixon-Brewer Co., Washington, D. C.; J. W. Lowe & Co., Kansas City; J. O. Gregoire, St. Johns, P. Q., Can.; Twin Falls Produce Co., Twin Falls, Idaho; W. W. Willis, Clarksburg, W. Va.; W. H. Danes & Co., Evansville, Ind.; J. H. Hornby & Sons, New Brighton, Pa.; R. R. Delaney, Charleston, W. Va.; Daragh Co., Little Rock; R. J. Freeman, Augusta, Kan.; C. A. Shotwell & Co., Indianapolis; F. Y. Goldsborough, Porter, Okla.; J. L. Frederick Grain Co., St. Joseph, Mo.; J. H. Ballard, Chattanooga; T. B. McRitchie & Co., Newman, Ga.; Raabe Bros., Fort Jennings, O.; Meigs & Hays, Buhl, Idaho; Stegall Feed Co., Chattanooga; Flour and Feed Journal, Milwaukee; E. J. Wagner, Lamar, Colo.; H. C. Alexander Brokerage Co., Clarksburg, W. Va.; Clover Leaf Flour Mills, Kokomo, Ind.; W. H. Hurley, Clinton, Mo.; John T. Leonard, Charleston; W. Soule, Madison, Kan.; H. C. Luey, Claremore, Okla.; the Wilson-Legler Hay and Grain Co., Leavenworth, Kan.; Phillips Investment Co., Prowers, Colo.; L. Starks Co., Chicago; Buhl Grain and Produce Co., Buhl, Idaho; American Brokerage Co., Roanoke, Va.; Houser & Sutton, Newton, Ill.; Bryan Haywood, Kansas City; Hammond Hay Co., Hammond, Ind.; C. E. Hill, Toronto, Kan.; G. W. Hill, Grainola, Okla.; Kelley & Kell, Chelsea, Okla.; Cantrell Hay Co., Vernon, Kan.; Childs & Bozeman, Geneva, Kan.; Fred Sproul, Eldorado, Kan.; M. F. Wilkinson, Nowata, Okla.; H. C. McConnell, Kincaid, Kan.; W. E. Doud, Eureka, Kan.; Funk Bros. Hay Co., Kansas City; Stinebaugh-Magee Hay Co., Princeton, Kan.; C. O. Stotts, Yates Center, Kan.; J. S. Bobyeat, Ottawa, Kan.; J. H. Simpson, Fredonia, Kan.; Kansas City Alfalfa Feed Co., Kansas City; J. M. Coker, Inola, Okla.; Doyl Bros., Chicago; Horace Clark & Sons Co., Peoria; J. H. Brooks, Vandalia, Ill.; J. Simpson & Co., Chicago; H. G. Cherry, Kansas City, Mo.; Dickinson Bros. Hay and Grain Co., Humboldt, Kan.

THE PARADOX OF COOPERATION.

Dr. J. T. Holdsworth, dean of the University of Pittsburgh, speaking recently at a public meeting, on the subject of co-operation by urban buyers of merchandise said:

"Attempts to establish in this country co-operative organizations on the plan of the highly successful wholesale societies of England have almost, without exception, failed. Some few associations have persisted with varying degrees of success, but in the main co-operative schemes have not succeeded in this country. Inexperience, lack of business organization, lack of persistence—these have brought about the failure of most of our co-operative schemes. Cutting of prices by the co-operative societies has been another potent cause of failure. It may seem strange to hold that an organization formed to reduce prices should not reduce them too fast. In attempts to reproduce the plan of the great wholesale societies of England we have overlooked the cardinal principle of their system. These societies buy and sell for cash and at regular market prices. Cutting of prices is not permitted. Profits are returned to members in proportion to the amount of their purchases. The application of these principles has built up a movement in England and Scotland which surpasses anything in the commercial world today. It represents a membership of 2,120,000, over 10,000,000 customers, and an annual business in excess of \$50,000,000."

CROP REPORTS

THE CROP REPORT.

The November Crop Report gives the following for the U. S.:

Crops.	Yield per acre.—			Production (000 omitted).—	
	1912.	1911.	10-yr.	1912.	1911.
Corn, bu.	29.3	23.9	26.7	3,169,137	2,531,488
Buckwheat, bu.	22.9	21.1	19.3	19,124	17,549
Potatoes, bu.	112.3	80.9	94.3	414,289	292,737
Flaxseed, bu.	9.9	7.0	8.8	29,755	19,370
Tobacco, lbs.	803.4	893.7	825.2	959,437	905,109
Wheat, bu.	16.0	12.5	14.0	720,333	621,338
Oats, bu.	37.4	24.4	29.5	1,417,172	922,298
Barley, bu.	29.7	21.0	25.4	224,619	160,240
Rye, bu.	16.9	15.6	16.1	35,422	33,119
Hay, tons.	1.47	1.14	1.43	72,425	54,916

Corn.—Percentage of 1911 crop on farms November 1, 1912, is estimated at 2.6 per cent (64,764,000 bushels), against 4.3 per cent (123,824,000 bushels) of the 1910 crop on farms November 1, 1911, and 3.8 per cent the average of similar estimates of the past ten years.

Weight per Measured Bushel.—Wheat 58.3 lbs., against 57.8 last year and 57.7 the ten-year average. Oats, 33.0 lbs., against 31.1 last year and 31.3 the ten-year average. Barley, 46.8 lbs., against 46.0 last year and 46.9 in 1910.

Quality this year compared with the 10-year average: Corn, 101.1; buckwheat, 100.9; flaxseed, 101.2.

Details for the corn crop in principal states are as follows:

States.	Yield per acre.—			Production (000 omitted).—	
	1912.	1911.	10-yr.	1912.	1911.
Illinois	40.2	33.0	35.9	428,452	334,950
Iowa	43.0	31.0	32.7	432,021	305,350
Kansas	23.5	14.5	23.0	200,361	126,150
Missouri	32.0	26.0	30.7	243,904	192,400
Nebraska	25.0	21.0	28.1	189,350	155,925
Texas	21.0	9.5	19.0	153,300	69,350
Oklahoma	18.7	6.5	23.0	101,878	36,888
Indiana	40.5	36.0	36.4	200,354	174,600
Ohio	42.8	38.6	36.8	175,266	150,540
Georgia	13.8	16.0	12.6	54,510	59,072
Kentucky	30.4	26.0	28.1	109,440	93,600
Tennessee	26.0	26.8	24.9	86,632	91,120
Alabama	17.2	18.0	14.9	53,664	54,000
Mississippi	18.3	19.0	17.0	56,840	54,150
N. Carolina	18.2	18.4	16.1	51,106	49,680
Arkansas	20.4	20.8	20.5	52,163	49,712
South Dakota	30.6	22.0	27.3	76,347	50,820
Minnesota	37.5	33.7	30.1	84,975	74,140
Virginia	24.0	24.0	23.8	47,520	47,520
S. Carolina	17.9	18.2	13.9	34,278	32,578
Louisiana	18.6	18.5	18.6	33,815	33,300
Wisconsin	35.7	36.3	33.4	58,262	58,080
Michigan	34.6	33.0	32.2	56,121	55,770
Pennsylvania	42.1	44.5	37.0	61,003	63,858

PRICES OF AGRICULTURAL PRODUCTS.

The average of prices paid to producers of the United States for articles specified, on October 15, 1912, with comparisons, according to reports made by correspondents of the Bureau of Statistics of the U. S. Department of Agriculture, are shown here-with:

	Oct. 15, 1912.	Sept. 15, 1912.	Oct. 15, 1911.	Oct. 15, 1910.
Beef cattle, cwt.	\$ 5.36	\$ 5.35	\$ 4.32	\$ 4.64
Veal calves, cwt.	6.90	6.83	6.15	6.41
Hogs, cwt.	7.70	7.47	6.09	8.08
Sheep, cwt.	4.19	4.11	3.68	4.68
Lambs, cwt.	5.42	5.49	4.68	5.78
Milk cows	47.30	46.79	42.69	43.20
Horses	140.00	141.00	137.00	144.00
Wool, unwashed, lb. ....	.185	.187	.135	.181
Honey, comb, lb. ....	.136	.135	.137	.133
Milk, gal. ....	.231	.225	.213	.219
Apples, bu. ....	.61	.62	.66	.77
Peaches, bu.	1.05	1.10	1.31	1.23
Pears, bu. ....	.83	1.00	.97	.99
Beans, bu.	2.34	2.38	2.27	2.25
Cabbage, cwt.	1.08	1.25	1.58	1.58
Onions, bu. ....	.85	.89	1.02	.93
Tomatoes, bu. ....	.62	.59	...	...
Peanuts, lb. ....	.047	.048	.046	...
Hops, lb. ....	.222	.198	.378	.133
Broom corn, ton.	70.40	76.50	121.50	107.90
Sweet potatoes, bu. ....	.80	.89	.86	.76

Ohio state crop report makes condition of fall wheat 98, or 2 points better than in 1911; rye, 98; corn, 100.

Heavy snow in the northern half of North Dakota has covered uncut flax and wheat and rye in shock with 3 to 5 inches of snow.

Growing Kansas wheat is in almost perfect condition. Acreage reported larger in eastern and central counties, smaller in the western.

Oklahoma's state report, Nov. 1, gave the corn yield as 19.2 bus. per acre, or 105,000,000. Winter wheat progressing and conditions fine.

The International Institute at Rome, Oct. 23, gave the total wheat production of twenty-four principal producing countries as 3,257,000,000 bushels, 7.2 per cent more than they produced last year; barley, 1,279,000,000 in twenty-three countries, 5.2 per cent

more than last year; oats, 4,620,000,000 in twelve countries, 16.4 per cent more than last year. All calculations included the United States.

Secretary Fowler of the Canadian Northwestern Grain Dealers' Association estimates the wheat crop of Manitoba, Saskatchewan and Alberta at 188,333,000 bus.

Michigan state report: Condition of growing wheat, 90 in the state. Corn yield, 31.65 for state. Clover seed acreage harvested, 86 per cent of 1911; yield, 1.38 bus. Beans, 12.91 bus. yield.

Snow's report for Nov. 1, based upon husking returns, shows a corn yield per acre of 30 bus., or 2 bus. higher than was indicated by conditional figures on Oct. 1. On the basis of the Snow estimate of acreage this makes a total corn crop of 3,206,000,000 bus.

Goodman's October estimate of corn crop is 3,112,000,000 bus., a record in the aggregate and the second largest acreage per acre yield recorded. In all cereal production the crop of the country has made a record on the acreage. The wheat crop on the preliminary estimate is 101,000,000 greater than last year; the oats production 490,000,000, or 53 per cent. The total yield of the three great cereals is 1,172,000,000 bushels greater, which is an increase of 26 per cent.

The Canadian Department of Agriculture estimates the harvest of winter wheat at 16,773,000 bus. compared with 26,074,000 in 1911, a deficiency due largely to winter kill. Spring wheat also is estimated at a slight decrease from 1911, the preliminary being 189,256,000, or, with winter wheat added,

206,029,300, against 215,851,000 in 1911. Rye, 1912, 3,136,000; 1911, 2,694,400; barley, 1912, 46,497,000; oats, 376,943,000 (34-lb. bus.) in 1912 and 348,187,600 in 1911; flaxseed, 23,145,000; hay and clover, 11,038,000 in 1912, and 12,694,000 in 1911.

FIELD SERVICE.

The accompanying chart indicates approximately the distribution of the field service of the Department of Agriculture, as of February 1, 1912, by states and counties. There were 1,773 separate agencies represented throughout the United States, with a total of 7,499 employees, divided as follows:

States.	Locations.	Employees.
North Atlantic	139	888
South Atlantic	352	631
North Central (east of Mississippi River)	94	1,002
North Central (west of Mississippi River)	138	993
South Central	552	988
Far Western	498	2,997

The distribution of the service by bureaus is indicated below:

	Loc.	Emp.
Weather Bureau	219	615
Forest Service	297	2,475
Animal Industry	211	2,861
Plant Industry	774	990
Bureau Chemistry	71	247
Bureau Statistics	67	67
Experiment Stations	44	59
Entomology	34	106
Bureau Soils	26	45
Office Solicitor	6	11
Division Accounts	6	6
Biological Survey	18	18

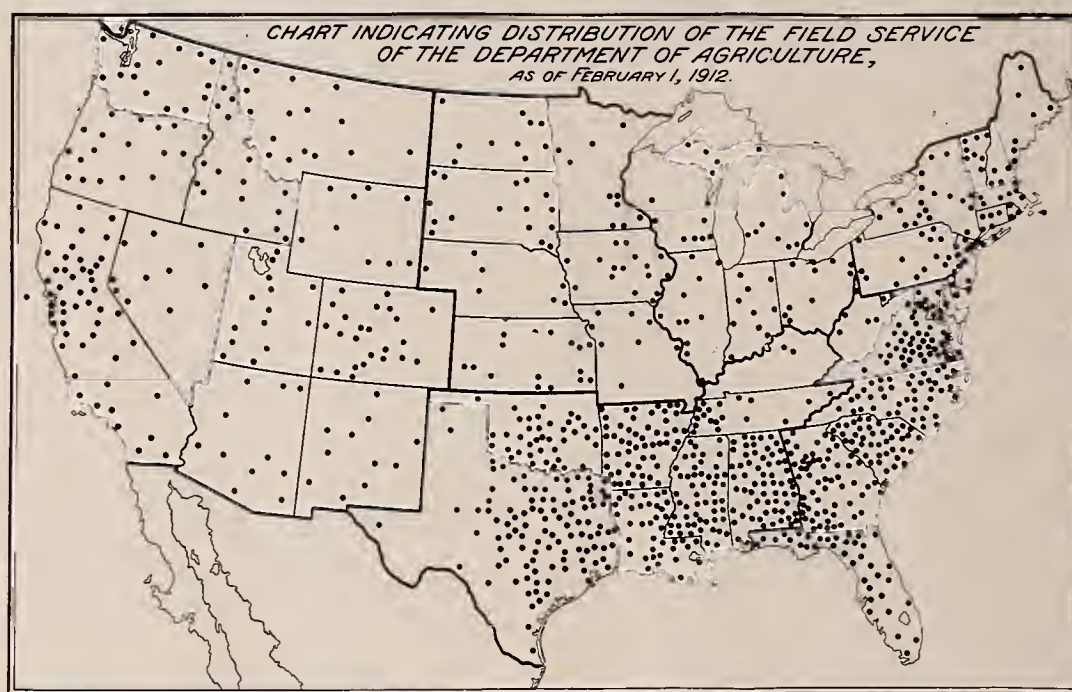
The large number of locations in the South Atlantic and South Central states is due principally to the farmers' cooperation demonstration work, the appropriation for which was made to the Bureau of Plant Industry for the purpose of combating the cotton boll weevil. Of a total of 904 locations with

1,619 employees in these sixteen states, 644 locations with approximately 650 employees are charged to demonstration work, leaving a balance of 260 locations with 969 employees assigned to other lines of activity. These demonstration farms are conducted in the Southern states to illustrate methods of growing cotton despite the weevil and to educate the farmers in crop diversification. Other plant industry stations consist of testing gardens, experiment farms, dry land experiment farms, reclamation projects and grain standardization laboratories.

The number of locations with the relatively large number of employees in the Far West is due principally to the Forest Service organization. The six field districts of this service are in the West with the principal administrative offices and office and field employees located in each district.

The Bureau of Animal Industry maintains a considerable force of inspectors at each of the principal slaughter centers, such as Chicago, Kansas City, South Omaha, Philadelphia, New York, etc., in carrying out the provisions of the meat inspection law. This service covers 239 cities. This explains the proportionately large number of employees as compared with the number of locations in the North Atlantic and North Central (east and west) divisions. The eradication of animal diseases, scabies of sheep and cattle in the West and cattle ticks in the South, the enforcement of quarantine laws, a small number of experiment stations and the inspection of imports at Mexican, Canadian and Atlantic ports make up the remainder of this service.

The field service of the Bureau of Chemistry consists almost entirely of food and drug inspection



laboratories at the principal ports of entry and trade centers.

The field service of the Weather Bureau is rather uniformly distributed, New York, Michigan, Texas, Washington and California being the states in which the largest number of stations are located. These consist principally of meteorological and climatological stations, forecast centers, river and rainfall, hurricane, and forest stations.

The Bureau of Entomology, in its investigations relating to the gypsy moth and insects affecting cereal, fruit and field crops, citrus fruits and forest trees, is represented principally in Massachusetts, Texas, Utah and California.

The Bureau of Soils is engaged in the making of soil surveys in Alabama, Arkansas, California, Florida, Georgia, Mississippi, Texas and other Southern states. Parties are kept in the South during the winter months and transferred north when weather conditions permit.

The Bureau of Statistics maintains a state statistical agent in each state and certain additional agents reporting on special crops. The field service of the office of experiment stations is in connection with drainage and irrigation investigations principally in the South Central and Far West divisions. The Biological Survey has agents and game wardens principally in New York, Florida, North Dakota, Oregon and California. Assistant solicitors and district fiscal agents, working under the solicitor and division of accounts respectively, are attached to each of the six forest districts in the West for the handling of local legal and financial matters.

The chart is not and can not be more than approximately accurate. Temporary employees, those in transit or stationed at locations for a short space of time, and those devoting only a portion of their time to the work of the Department are eliminated.

Dr. Otto Brandt of the grain exchange of Dusseldorf has been visiting Kansas City, among other places. He said he was hunting for wheat; but judging from the interview with a reporter he was long on jolly and unloaded.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

LIKES THE PAPER.

Editor American Elevator and Grain Trade:—We enclose subscription for "American Elevator and Grain Trade" for one year, which we regard as one of the best published.

Yours very truly, J. M. WILLIAMS & CO.
Memphis, Tenn.

THE OCTOBER NUMBER.

Editor American Elevator and Grain Trade:—I certainly compliment you on the splendid, complete report of the National Convention in your last issue. I have had several inquiries for copies containing a report of the convention and would like for you to send me some extra copies of this number if you have them to spare.

Very truly yours, LEE G. METCALF,
Illioipolis, Ill.

NEW FLOUR BRANDS.

Editor American Elevator and Grain Trade:—Gentlemen: During the present year we have had several of our flour brands registered, three of which are used for winter wheat flour, namely, "Challenge," "Cotton Ball" and "Seneca Chief," and the brand of "Mainspring" was registered and will be used altogether for spring wheat flour.

Yours very truly, HARTER MILLING CO.
Toledo, Ohio. A. Mennel, Pres.

IN BUSINESS IN MONTANA.

Editor American Elevator and Grain Trade:—I am now located at Roundup, Mont. I bought the elevator here known as Roundup Elevator Co., and it still goes by that name. We have a very good quality of winter wheat. The territory is new and I do not expect a very big run—I estimate 40,000 bushels. The farmers are holding grain as much as possible on account of prices.

Yours truly, W. P. LADD.
Roundup, Mont.

IN THE HARNESS AGAIN.

Editor American Elevator and Grain Trade:—I was out of the grain business from March, 1911, until July, 1912, but am back in the harness again at Hitchcock. Here we are in the thick of it with competitors in the way of a track buyer and a farmers' elevator building which will open about December 15.

Crops are good in this locality, and we are paying Minnesota price less freight.

Yours respectfully, J. B. MORRISON.
Hitchcock, S. D.

VALUE OF CROPS.

Editor American Elevator and Grain Trade:—Gentlemen: Please let me know by return mail the estimated value of the entire farm products of the United States for the season of 1912. If you have any produce paper or Board of Trade records showing that value wish you would send me that.

Yours truly, FRED WELCH.
Owosso, Mich.

Ans.:—The Agricultural Department makes the total value in 1912, \$6,883,000,000; in 1911, \$4,660,556,000.

SOLD HIS BUSINESS.

Editor American Elevator and Grain Trade:—I beg to announce that I have disposed of my business interests in Tipton, Ind., including the grain, seed and coal yard operated by Fox & Davis, to Messrs Hershman & Son, to whom all communications and quotations should be addressed in the future.

I bespeak for the new firm the kind consideration of the trade, and, thanking the trade in general for the cordial treatment I have received, I beg to remain

Yours very truly, FRED B. FOX.
Tipton, Ind.

GRAIN EXHIBIT AT INDIANAPOLIS.

Editor American Elevator and Grain Trade:—During the mid-winter meeting of grain dealers and millers of this State, last January, the grain exhibit that was presented by the grain dealers and their farmer customers throughout the State was recognized as a very satisfactory and successful exhibit.

The Indianapolis Board of Trade has recently taken steps to provide funds for a much more extensive exhibit this year. The grain committee of the Board of Trade has taken an active part in it and has recommended to the governing body that it appropriate a larger sum than was appropriated last year with which to pay cash prizes. They have also appointed a committee to wait upon

the business men of Indianapolis, with a view to securing special prizes to be awarded.

The schedule of prizes and premiums will be forthcoming shortly and we will be glad to supply with advance copies. In the meantime, we want our people to know that we are going to endeavor to "pull off" one of the best "Prize Grain Contests" in Indianapolis in January than has been seen anywhere for many years.

Respectfully, CHAS. B. RILEY, Sec.
Indianapolis, Ind.

ST. LOUIS WEIGHING ON TROLLEY SYSTEM.

Editor American Elevator and Grain Trade:—The Merchants' Exchange, through its Department of Weights, has completed an arrangement to supervise the weighing of all hay and grain arriving over the St. Louis Traction System.

This is in line with our efforts in the past and while it is but a fraction of the team track business at St. Louis, it will probably be the cause of further development locally in the future. The fee is a reduction of from 40 to 50 per cent from the former cost of weighing.

Yours truly, JOHN DOWER, Supervisor.
St. Louis, Mo.

UNUSUALLY PLAIN TALK.

Early last month, the so-called "Chamber of the Bourse" at Vienna, after reciting in its annual report, the year's proceedings of that Stock Exchange and the progress of Austrian finance, turned its attention to the past year's Stock Exchange speculation. On this head, it pointedly remarks:

"Speculation has extended widely to all classes of the population, although reliable experts have repeatedly warned the public since there can be no doubt that a very great number of persons have taken to speculation who have neither the understanding nor the means of carrying out transactions with the slightest chance of success."

Commenting on this somewhat unusual action by a Stock Exchange committee, a Vienna correspondent observes:

"Until about a year ago, the public seemed merely anxious to obtain a higher interest than the ordinary investment promises. But at present there can be no doubt that the hope of becoming rich in a short time inspires these speculators, who ignore the value or significance of the effects they buy, and only accept 'tips,' hoping that chance will favor them. Happily none of the shares, which rise to ridiculous figures merely because there is a general demand for them, belong to swindling concerns, but are for the most part solid industrial undertakings, but they will never pay dividends in any way proportionate to the figures at which they are quoted."—N. Y. Evening Post.

DR. CRUMBINE SAYS.

Speaking to the objection made to the ruling of the Kansas Board of Health that the sale of grain containing more than one-half pound of weed seeds per bushel is in violation of the Food and Drugs Act, with the enforcement of which act Dr. Crumbine is charged, that official makes the claim that no wheat shipments have been held up by him or his agents on account of an excess of weed seeds or foreign matter, but that he has found good wheat mixed with an inferior and damaged stack-burned wheat in just such quantities as might pass the grade, and that he has taken steps to stop such practice. "As the matter has come up, it does not concern the farmer directly," says the *Kansas Farmer*, "but concerns the grain elevators which, it is charged, have long and continuously followed the adulterating practice above named."

Dr. Crumbine's statement is as follows:

"This department has not 'held up' or 'seized' any cars of wheat up to the present time, nor brought any action against any person in the State for selling wheat containing weed seed. Not a bushel of wheat, so far as we have any knowledge, but what has found a market, that has been offered for sale, and we have evidence from all over the State that the warnings sent to threshers and grain dealers have been instrumental in greatly improving the quality of the wheat in many places.

"This department is not concerned with the grades of wheat, but we are charged with the enforcement of the Food and Drugs Act, which, in Section 7 of the act, specifically prevents the mixing or packing in of grain of an inferior quality to good grain, 'so as to reduce or lower or injuriously affect its quality or strength.'"

"Lest we be misunderstood, I want to say that the reprehensible practices above alluded to, of threshers and certain elevator men, represents but a small minority of the men engaged in this occupation; the great majority of them are in cordial sympathy and hearty support with the department in the provisions of the food and drugs law."

Peoria's distilleries have begun running on new corn.

PERSONAL

Jacob Erickson, a grain dealer at Roland, Iowa, married Miss Mae Olson, Oct. 19.

Joseph Kohler will manage the new elevator at Bismarck, N. D., for the Federal Elevator Co.

D. E. Frey of Bellingham, Wash., has accepted a position with the Vancouver Milling & Grain Co. of Vancouver, B. C.

R. P. Miner, agent at Jefferson, Iowa, for the Neola Elevator Co., married Miss Gladys Smith at Webster, Iowa, Oct. 17.

Chester Swan, bookkeeper for the Tuscola Elevator Co. at Caro, Mich., married Miss Ella Mead at Mt. Pleasant, Mich., recently.

I. Henry Bird, salesman for the Kelly Grain Co. at Wichita, Kan., recently married Miss Lola E. Stanley, who has been stenographer for the same firm.

Mrs. John Peterson, wife of John Peterson, who operates the elevator at Fraser Junction, Iowa, was seriously injured in an automobile accident, recently.

Edward Bittrick, chief clerk of the Inspection Department of the Baltimore Chamber of Commerce, married Miss Kathleen Kroell at Baltimore, Md., Oct. 19.

John G. McHugh, secretary of the Minneapolis Chamber of Commerce, married Mrs. Jennie McHugh, widow of his brother, the late James V. McHugh, Oct. 25.

C. Birkett, manager of the Bank of Hamilton at Treherne, Man., has been appointed secretary of the Grain Commission and will make his home in Fort William, Ont.

J. R. Campbell, who has been associated with the Pure Seed Division of the Department of Botany at the Agricultural College of North Dakota, near Fargo, N. D., has resigned to accept a position with the Better Farming Association.

T. R. Horner has relinquished his position with the Monarch Elevator Co. at Graceville, Minn., after twenty years of continuous service. Impaired health is responsible for Mr. Horner's resignation. He will be succeeded by M. T. Mahoney.

S. Ogden Steinhardt, junior member of the firm of Herman N. Muller & Steinhardt, importers and exporters of grain, recently married Miss Alice Henrietta Koch in Berlin, Germany. Mr. Steinhardt formerly lived in Brooklyn, N. Y., but he now resides in Hamburg, Germany.

J. Charles McCullough, a seedman at Cincinnati, was mysteriously shot by some unknown person while riding on the rear platform of a street car, Oct. 28. The bullet pierced a billboard before striking Mr. McCullough in the arm. The physician pronounced the wound as not necessarily serious.

Seth Way, of the stock and grain buying firm of Seth Way & Co., Knoxville, Iowa, was seriously injured in a runaway accident recently. One of his teams, driven by an employe, started to run with a wagon partially loaded with coal, when Mr. Way seized one of the horses by the check rein, and was thrown under the wagon, which passed across his abdomen, causing internal injuries.

Hugo Meyer, representing the Getreide Commission Aktiengesellschaft, one of the largest importing grain houses of Germany, having its head offices at Duesseldorf and branches at Mannheim, Rotterdam, Antwerp, Bremen, Hamburg, Dortmund, Duisburg, Braila and Cherson, has been touring America and visiting some of the larger grain exchanges. Mr. Meyer is a member of the board of directors of the Chamber of Commerce at Duesseldorf and was a delegate representing that body at the Fifth International Congress of Chambers of Commerce at Boston.

James Marshall, dean of the Minneapolis grain trade, celebrated recently the fiftieth anniversary of his identification with the grain business. Mr. Marshall is 77 years of age but is still active as a grain buyer. It was with wheat raised on his father's farm in Dodge County, Minn., that he gained his first experience in finding a market, when he drove 75 miles to Red Wing and sold a load for 40 cents a bushel. In 1862 he entered the employ of Phelps & Mann as grain buyer at Red Wing, Minn., and it was during the early years of his buying there, he claims, that the "future" markets came into existence, largely through his own efforts. Having on hand large amounts of grain at the closing of navigation on the Mississippi River, at the opening of winter which necessitated the financing of wheat by the grain buyers on the west bank, they began buying and selling the grain for delivery after navigation was resumed in the spring.

October's receipts at Chicago, 19,518 cars, are the largest since 1907.

Dakota farmers and elevator men continue to pile wheat on the ground for want of better storage, covering the grain with tarpaulins.

FIELD SEEDS

The early frost threatens a scarcity of Kaffir seed in parts of Kansas.

Washington County, Ore., reports a record crop of clover seed for 1912.

Virginia is buying alfalfa seed freely, Kansas stock being preferred apparently.

A seed testing laboratory is at work at the Agricultural Station at Lexington, Ky.

Chas. Cline has built a seed corn warehouse at Abingdon, Ill. It will hold 90,000 ears.

The seed testing laboratory at the Agricultural College, Columbia, Mo., is again open for work.

Missouri's seed corn week, appointed by Gov. Hadley, began on October 21, and was generally recognized.

The Rape Seeds Co., Cincinnati, has been incorporated; capital, \$5,000; by Wm. J. Rape, Harry H. Peters, and others.

The Henry Field Co., Shenandoah, Ia., has secured more buildings in that city which will be remodeled for a seed business.

Hugh W. Bunn of Chenoa has developed a new strain of Reid's yellow dent corn that is a good yielder and is ready to crib at October 1.

The Colorado Seed and Nursery Co. has begun business at Denver, Colo. C. R. Root is manager, assisted by Wm. Horlacher and R. A. Gettelman.

The Sunset-Central Railway Lines of Texas are distributing new varieties of alfalfa and other grasses among farmers of Western Texas and trans-Pecos district.

State Supt. of Schools Cary of Wisconsin says that from present indications good seed corn will be scarce next spring unless more attention is paid by farmers in selecting, drying and storing it.

P. L. Howe of Minneapolis has offered \$100 for each of the five bushels of wheat which will be awarded the \$5,000 prize at the Northwestern Products Exposition, to be held in Minneapolis November 12 to 23.

The *Dasyneura leguminicola*, Lint, a clover seed midge which prevents the formation of the seed in the blossoms, has been reported as abundant in various parts of the State, and A. L. Lovett, of the crop pest force of the Oregon Agricultural College, is making investigations.

Prof. F. G. Crane, agricultural extension agent of the Great Northern R. R., has purchased a farm near Crookston, Minn., upon which he will place his two sons, aged twenty-one and nineteen years, who will operate the only pure seed farm and seed house in the Red River Valley.

The Gregory Farm Seed Co., Bay City, Mich., has been reorganized with a capital stock of \$30,000, and has quarters at Third and Adams Streets. The following officers were recently elected: President, V. L. Tupper; vice-president, John F. Jozwiak; secretary and manager, Frank H. Gregory; treasurer, E. J. Schreiber; assistant secretary, C. M. Baumgarten.

Ames, Iowa, reports that the College experimentalists have produced a new strain of Silver King corn which, grown in fields near Algona, Mason City and Brit, reached maturity far in advance of other varieties commonly grown in Northern Iowa and yielded at least eighty bushels per acre. The new strain is spoken of in the most enthusiastic way by the station agronomists.

Central Kentucky Bluegrass Seed Co. has been organized at Lexington; capital \$20,000; incorporators, James B. Haggin of New York and Fayette County; David M. Look, J. Edward Madden, G. Clay Goodloe, Clarence LeBus, W. R. Estill, S. H. Halley and C. H. Berryman, all of Lexington; W. E. Simms of Spring Station and Joseph Hall of Paris. The company has a bluegrass seed cleaning establishment in Lexington. The management is in the hands of G. C. Goodloe.

INDIA'S SEED OIL INDUSTRY.

The Bombay government is about to make an investigation into or survey of the seed-oil industry of the Presidency, with a view to improving native methods and to search out any special difficulties that have been encountered in marketing the product, as well as inquiring into the economic conditions of the workers.

The following specific particulars among others will be investigated: Kinds of oil seeds in use and the districts where each is employed; the purposes to which the products are applied and the areas of demand for the same; variation in the oil or other content of the same kind of seed in different districts; special methods applied to each of the varieties of seeds in use; the quantity of all the resulting products from a unit weight of seeds under each method and in each area; the extent to which improved "ghanis" are used and the advantage derived therefrom; the extent to which power is used for driving native oil-extracting machinery and the

possibility of development in this direction; the extent to which any method is used to supplement the "ghani" in the oil-pressing industry and the possibilities in this direction; the lines of development, if any, which the native industry can take and the extent to which it can be supplemented by factory methods. The factors which prevent the successful establishment of cottonseed oil mills are to be specially investigated and reported on.

COMING CORN SHOWS.

It would tax the reader's patience to no purpose to enumerate all the corn shows, large and small, that will be held throughout the country this fall and winter; however, a few may be called to mind, such as—

The National Corn Show at Columbus, S. C., in January.

The Indiana Corn Growers' Association show at Purdue University, Jan. 6-10.

The fifth annual Ohio State Corn Show at Lima, Jan. 7-11. These shows will all attract national attention and counties or communities which carry off premiums at the shows will get some valuable advertising.

A NEW ALFALFA HINT.

Dan Bierwagon of West Fork, Stanley Co., S. D., has made a new discovery with alfalfa. Knowing that alfalfa is native to the mountains and observing that mountain plants grow best in washed down soil, where more dirt is being continually washed in, he risked a quantity of Turkestan alfalfa seed on a piece of very unpromising washed over land, on which there was a heavy coating of alluvial mud. More mud followed, covering up the crown of the plant. These plants yielded enormously and proved especially hardy, neither winter nor summer killing; and he believes that the secret of the result was in the covered crown, whereby this vital part of the plant was protected alike from heat and cold and the teeth and hoofs of grazing animals.

MAIZE IN OREGON.

The states of the Pacific Slope have never deemed it possible to grow Indian corn on account of the rainy season which has prevented the maturity and curing of the grain. Nevertheless, from time to time tentative efforts to grow the cereal have been measurably successful. One of the latest reported trials has been made in the Willamette Valley in "South Bottom," near Salem. Three varieties were tried out,—one a white dent called Currin corn; the second a yellow dent, and the third was called Australian Flint. These were planted about May 15; on clay loam, well cultivated. Each variety, so the report reads, "reached the stage when the grain became glazed in the last week in August. The Australian Flint hardened more rapidly than either of the two dent varieties, but the ripening process was slow and irregular. By September 20 the Flint corn had become hard, being fully ten days before the dent corn had reached the same stage of maturity." The grower says that neither variety could have been husked and cribbed in Eastern fashion at any time before October 15, at least, without first kiln-drying.

The Currin corn was selected as the most desirable to propagate next season. It is a white dent corn, with good, vigorous growth, fodder of medium height and each stalk bearing from one to two ears of standard size and filled with grain to the very tip. It is believed that if this corn should be grown in the valley for a series of years, it might become acclimated and result in benefit to the agricultural interests.

CLOVER SEED.

Letters from Hamburg to J. F. Zahm & Co., Toledo, under date Oct. 17, among other things say: Judging from present indications the European crop of clover seed will scarcely exceed one-quarter of the average. These unfavorable crop prospects combined with an active European demand have turned our markets extremely firm lately. Expect to see exorbitant values to rule this season, if the weather in Galicia, South Russia, and Transylvania, where the clover plants are mostly standing in the fields yet, should not turn dry and warm shortly and remain so for about two or three weeks. In our opinion, exports to America will not be a necessity, for we might not have very much seed available to fill the European consumptive demand. Later advices note a continuance of the rains complained of as likely to cause damage.

Imports of clover seed last year prevented a famine on this side; but the character of the receipts was for some years not of the best.

Further than that the statistical reports of imports are very confusing. They should be, as an importer writes C. A. King & Co., Toledo, "better classified." The statisticians put everything "into one pot"—crimson, white and alfalfa in the red clover. Large seaboard seed dealer writes: "It certainly seems there should be some means of getting at the quantities of red, crimson and alfalfa clovers, instead of reporting all under the head of red clover.

We have considerable crimson clover coming in ourselves, which was bought at low prices during the recent low prices in September. Have this bought not only for prompt shipment but for December, January, February; and know other firms have some purchases also. Suppose these will all come in and be reported under head of 'Red Clover.' We also know there are considerable quantities of alfalfa bought abroad coming in now. Suppose these will all be reported under the present system under the head of 'Clover Seed.'"

SWEET CLOVER.

In summarizing Farmers' Bulletin 485, on "Sweet Clover," the authors, Messrs J. M. Westgate and H. N. Vinnall of the Bureau of Plant Industry, say, in substance:

"It is an efficient soil renovator and nitrogen gatherer; it grows in soils too low in humus content for the favorable growth of most other legumes; its large roots, which develop the first year, facilitate drainage and do much to break up and improve the tilth of the soils which lie below the reach of the plow, as these roots rapidly decay when the plant dies, and their effect is therefore almost immediate; it occurs as a weed usually along roadsides and in other places not utilized or cultivated; it is not troublesome in cultivated fields or meadows as ordinarily treated, because it can not persevere more than two years from one seeding; the presence of some hard seed which does not usually germinate the first season may enable it to continue in a meadow for a number of years longer; it can usually be killed by mowing when in full or late bloom; where alfalfa succeeds well, the introduction of sweet clover is not to be recommended; it is a good builder up of soil in both humus and nitrogen content and is thus preparing it for subsequent profitable crops; the failures in obtaining a stand of sweet clover are due in part to the high percentage of hard seed and in part to seeding on too loose a seed bed, especially when combined with a lack of inoculation; spring seedings in general are satisfactory, but in the South excellent stands are also obtained from late winter seedings.

"Analyses and feeding experiments indicate that sweet clover is nearly equal to alfalfa in feeding value. The feeding value, palatability, and presumably the digestibility decrease rapidly after the blooming period."

PROGRESS IN GRAIN-SORGHUM INVESTIGATION.

Under the direction of Secretary Wilson progress has been made during the past few years in the improvement of grain sorghums—the different varieties of sweet sorghum, broom corn, milo, durra, kafir, and kowliang. The grain-sorghum belt to which these crops are especially adapted comprises the central and southern portions of the Great Plains; and it is in this region that these crops are looked upon as standard by reason of the ease and the reasonable certainty of their production, their general utility for forage, and the value of the grain for feeding stock and for human food, surpassing both corn and wheat in these respects.

In accordance with the principles established by the Bureau of Plant Industry, a great advance has been made in the improvement of dwarf milo and in the extension of the area devoted to it. Breeding has accomplished the evolution of a dwarf kafir which greatly reduces water requirements and may be harvested with a grain header—a strain of almost phenomenal yield and much earlier than the standard sorts. Application of the principles of breeding and selection to broom corn has produced a dwarf strain that bears a standard brush capable of being cut without tabling the stalks. The area devoted to the growth of the extra early variety of Machu among the brown kowliangs has been successfully extended northward as far as central and western South Dakota, where it has proved to be superior in yield to the corn crop. By reason of experiments showing that extra early planting in that region will result in a crop which flowers before the sorghum midge (the cause of sterility) has become sufficiently abundant to destroy the seeds, the grain sorghums have also become a profitable grain crop for the large dry section of southern Texas. Moreover, the grain-sorghum crop enjoys the distinction of being practically indispensable in the settlement of the region where it is grown.

Several important additions to the literature of the subject have been issued during the past six years, which may be obtained upon application to the Secretary of Agriculture.

The Illinois Grain Inspection Department is fitting up the moisture testing department to handle 75 cars at one treating, so that hereafter all cars will be tested and the certificate will show the moisture content.

The Corporation Commission of Oklahoma is weighing a large number of cars in that State to ascertain if the stenciled weight on the cars is correct. This is a preliminary step to a complete investigation of car weights on all roads traversing Oklahoma.

OBITUARY

F. R. Warner, an old-time member of the Chicago Board of Trade, died at Geneva Lake, Wis., Oct. 21.

Edward Brady, local manager for the firm of Hargraves & Brady, grain dealers at Cullom, Ill., is dead at the age of fifty-seven years.

Alexander S. Wilson, formerly well-known in the grain business at Duluth, Minn., died Oct. 17, at the St. Luke's Hospital, following a long illness.

William F. Shomers, 51 years of age, died at Buffalo, N. Y., recently. He was weighmaster at the Great Eastern Elevator, and was formerly connected with the Thornton & Chester Milling Co.

Colonel George H. Kimball, formerly in the grain commission and storage business in San Francisco, died recently in Los Angeles, after a short illness. Mr. Kimball was one of the pioneers of California.

Robert Sackreiter, a grain buyer at Sanborn, Minn., was burned to death in a fire that destroyed his home, Oct. 31. Mr. Sackreiter was 29 years of age and had been married three years. He is survived by his wife, his parents, three brothers and one sister.

Horace P. Brown died at his home in Portland, Ore., Oct. 16, aged 77 years, following a short illness. Mr. Brown had lived in Portland three years but previous to this had been engaged in the grain business at Des Moines, Iowa, where he was well known. His widow and two sons survive him.

John McQueen, local manager of the Matheson Lindsay Grain Co. at Brandon, Man., dropped dead Nov. 2 while in the act of using the telephone. Mr. McQueen was 63 years of age. For many years he had been a prominent farmer in the Carievale district until five years ago when he entered the employ of the Matheson Lindsay Grain Co. He is survived by a wife, three sons and two daughters.

James Madison Belden died at his home in New Britain, Conn., Oct. 27, following a long illness. He was 63 years of age and had been a resident of New Britain all his life, the house in which he died having been occupied by his ancestors for 200 years. During the greater part of his life he had been engaged in the grain and feed business. He is survived by his wife, a daughter, a brother and a sister.

Leslie G. Dey, 46 years old, died recently at his home in Newark, N. J., from a complication of diseases. He was born in Fairfield, N. J., and went to Newark when he was twenty years of age and engaged in the wholesale grain and feed business. For many years he was with the late John A. Beyer, but after the death of his partner he went in business for himself. His widow and one son survive him.

W. A. Standard, grain buyer for W. H. Houser at Albion, Wash., dropped dead at his home in that city recently. He was 53 years old and one of the pioneer settlers in that district, having taken a homestead between Albion and Colfax, Wash., many years ago. Mr. Standard had suffered with stomach complaint for some time and had submitted to two operations for this trouble. He is survived by a wife, two daughters and one son.

John E. Soper, one of the oldest members of the Boston Chamber of Commerce and formerly a vice-president of the organization, died Oct. 14, at the age of 88 years. Mr. Soper was a native of Maine but early in life went to Boston where he became associated with the grain business, continuing in that field for fifty years. He was active in the municipal affairs of Waltham, Mass., where he had made his home for forty years. He is survived by a wife and two daughters.

Henry Uhlman, one of the oldest grain men in Peoria, Ill., suddenly died Oct. 22, following an acute attack of stomach trouble. He had been suffering from the malady for two weeks but had not been seriously affected, it was thought; yet death came before a physician could be summoned. He had been associated with the Peoria Board of Trade for more than thirty years and was highly respected. He was sixty years of age and is survived by his wife, a son and a daughter.

John Kennedy, one of the best-known grain men on the Great Lakes, passed away at his home in Buffalo after an illness of three weeks. Mr. Kennedy was 72 years old and for the greater part of his life was a member of the firm of Kennedy, Pfuhl, Lehman & Johns, grain merchants, having retired about five years ago. He was born in Ireland and was one of a family of twelve brothers and two sisters, of whom he was the last survivor. He came to this country when he was eighteen years of age and entered the grain trade, having been engaged in the business for 48 years. Three daughters and three sons survive him.

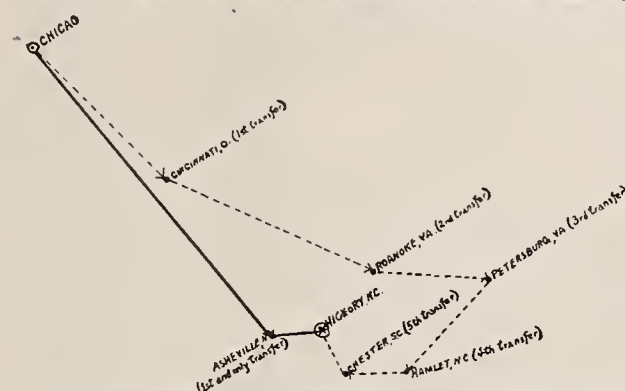
The Cleveland Grain Co. of Cleveland, Ohio, brought suit against John P. Taylor, owner of the

steamer R. P. Fitzgerald, claiming that more than 9,000 bushels of grain were damaged by a leakage of oil from a tank in the steamer, and demanding \$4,218.57 damages. The claim was overruled in the District Court at Detroit and the plaintiff has appealed the case in the United States Circuit Court of Appeals.

HOW TO MISROUTE SHIPMENTS.

The accompanying chart sets forth the actual facts concerning the movement of a shipment forwarded from Chicago to Hickory, N. C., as routed according to instructions furnished by shipper, and as it would move if routed according to "Way to Ship."

The dotted line is the shipper's circuitous route and the full line is the direct route per "Way to Ship." The junctions are shown in approximate geographical location to one another, and the illustration therefore shows substantially the zig-zag



movement of the misrouted shipment by comparison with the correct routing according to schedules and loading provided by carriers.

	As routed by the shipper.	If routed per "Way to Ship."
Distance from Chicago to Hickory, N. C.....	1,357 miles	822 miles
Number of times transferred en route.....	Five	Once
Due to arrive at destination	10th day	4th day

HOW A CHICAGO SHIPPER, WHO DIDN'T KNOW ABOUT "WAY TO SHIP," FINALLY HOLED IN AT HICKORY.

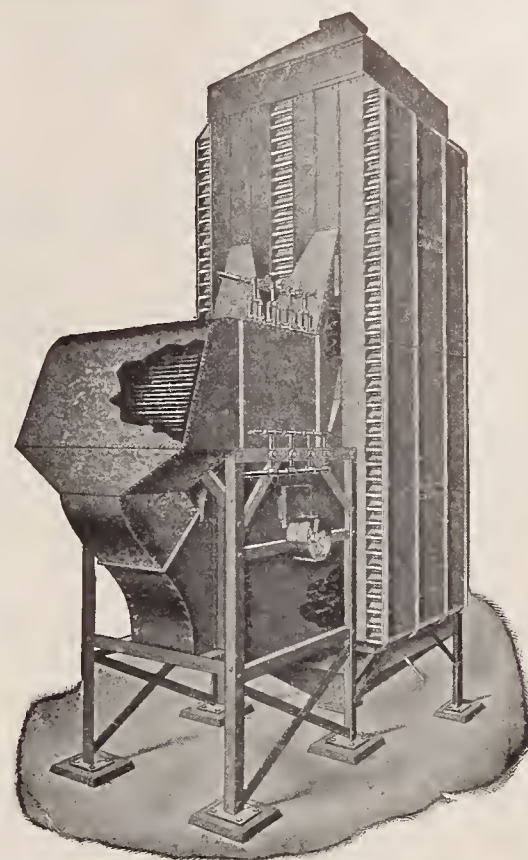
What does such misrouting mean? It means that the carrier is put to the cost of hauling shipments 535 miles farther or 165 per cent of the distance under the route shown in "Way to Ship"; that the carrier is put to the expense of five transfers instead of only one; that the liability of loss and damage and possible inability to locate the shipment at all is 500 per cent greater; and that the best possible time according to route chosen by the shipper is two and one-half times that according to "Way to Ship," while the many transfers increases the chance of considerable more delay.

If properly routed the carrier would have saved the expense of the unnecessarily long haul and numerous transfers, and the opportunity for loss, damage and delay would have been minimized. Prompt service too makes a satisfied customer; and the prestige of the individual shipper and the market is assured.—Chicago Commerce.

RAILROADS AND AGRICULTURE.

According to data collected by the Bureau of Statistics, Department of Agriculture, about three-fourths of the railroad mileage in the United States is operated by companies which are making organized efforts to develop agriculture. These efforts consist partly in trying to induce more people to migrate to certain regions and engage in farming there. This work has been carried on by various "immigration" and "colonization" departments of railroads for several decades. Another class of efforts in behalf of farming is directed toward agricultural education. Among the ways used to promote education are instruction trains, demonstration farms, experiments on private farms, publication and distribution of literature relating to methods of farming, and the employment of agricultural experts to co-operate with farmers. These efforts involve considerable expense, but they are expected to bring greater traffic and increased revenues.—Crop Reporter.

Honest, legitimate business has nothing to fear. All that is necessary is a clear conscience and a clean record. President-elect Wilson and the Democrats will respect legitimate business. They will be careful not to remove healthy tissues while cutting out the cancers. Some fear they will abolish future trading which moves the crops, prevents monopoly by a small group of men, reduces the middleman's profits to a minimum, and gives small dealers a fair chance. Future trading is necessary and healthy. The bucket-shops are the cancers. The Democrats will probably pass a federal anti-bucket shop law which is badly needed.—Frank I. King.



The Hess Ideal Drier and Cooler for Country Elevators, Mills, etc.

Capacity 800 to 1200 bushels per 10 hours
Price \$900.00 f. o. b. Chicago

More grain is dried in

Hess Driers

than in all other makes combined.

Why?

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are suitable for use with gasoline, gas, alcohol or electricity. They are guaranteed for accuracy.

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Hess Warming & Ventilating Co.

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[For the Illinois Grain Dealers' Association.]

THE NATIONAL RESERVE ASSOCIATION.

AN OUTLINE OF THE AIMS AND PURPOSES OF THE NATIONAL CITIZENS' LEAGUE FOR BANKING REFORM.

By ROBERT W. BONYNGE.*

There is, unfortunately, a great deal of apathy on the part of the general public regarding the reform of our banking and currency law. It is erroneously assumed by many that these questions are problems to be solved primarily by the bankers. The truth is that every man engaged in any gainful occupation, whether he has a bank account or not, is directly affected by the character of the country's banking system. Owing to the indifference of a considerable number of the people to these questions, there are many popular misconceptions of the proper functions of banks, and a woeful lack of understanding of the plan recently proposed by the National Monetary Commission for a remodeling of our banking system.

There is a popular impression, for instance, that the chief function of banks is to receive and loan out money. Generally speaking, the people do not seem to comprehend the fact that the greatest service rendered by the banking institutions to the commercial interests is in buying and selling credit. About 95 per cent of the entire business of the country is carried on through credits furnished by the banks. It is bank credit, then, furnished by means of loans and deposits subject to check thereon, through which the enormous exchanges of the products of the soil and the factory daily take place. If banking credit should be suddenly withdrawn, the business of the country would come to an immediate stop and ruination and bankruptcy would be the inevitable result. In the past, we have had temporary suspensions of credit, and the loss thereby entailed upon the whole American public it would be impossible even to estimate. It is for this reason that the whole public is concerned in the subject of the reform of our banking and currency laws, and in seeing that reasonable instruments are placed in the hands of the banks to enable them to serve their customers and the public generally at all times.

Experience has demonstrated that our present system is wholly inadequate to the business needs of the public. Under any unusual strain it collapses. At a time when the banks of the country should come to the aid of its legitimate business, they are compelled by the laws under which they do business temporarily to abdicate their functions and wait until the financial storm blows over.

The panic of 1907 brought these facts in a most forcible manner to the attention of the American public and made it evident to the business men, as well as the bankers, that a revision of our banking and currency laws could not longer be delayed.

The defects in our present system have frequently been pointed out. I will therefore content myself with simply mentioning the principal defects and in giving the briefest possible outline of the remedy proposed for them by the National Monetary Commission.

These defects are: First, our antiquated system of reserves, under which a portion of the reserves is scattered among the many thousand units making up our series of banks, thereby rendering that portion of the reserves ineffective for use in times of emergency. Under this system another portion of the reserves and a large amount of the surplus moneys of the country naturally gravitate to the banks in New York City, where alone they can be profitably employed at certain times of the year by being loaned out on call to stock brokers upon the security of New York stock exchange collateral. The consequence is that all the business of the country, its manufacturing, agriculture and merchandising are dependent for the currency with which to carry on their operations on speculative movements in Wall street.

Second, the failure to provide any legal method whereby the scattered units of our series of banks can properly co-operate either for their own mutual protection or for the utilization of our great banking resources. With more than 20 per cent of the entire monetary gold supply of the world, and more than 40 per cent of the banking power of all the nations of the earth combined, we are frequently forced to look to the banks of foreign countries to tide us over our financial furries.

Third: The inelasticity of our bond-secured bank-note currency, which, in a broader sense, also includes the inelasticity of our entire credit system. Everyone who has given any consideration at all to our currency problems realizes that we must soon have some other basis for our currency than the debt of the government.

We are about to have a congressional investigation of what is termed the "Money Trust." I feel confident that if the investigation is thoroughly conducted it will convince the people that the defects of our present banking system, particularly those relating to the reserves of our banks, are altogether responsible for the concentration of the surplus moneys of the country in the New York City banks, and their use by those banks for furthering speculative movements in Wall street. It is the fault of the system under which our banks are operated, and there can be no remedy until the system itself is thoroughly remodeled. The banks in New York City are operated, as all the other banks throughout the country are, for the profit of their stockholders. No

legal responsibility is imposed upon them to act as the custodian for the reserves of other banks, or to regulate the monetary conditions of the country, nor are they given the necessary powers to enable them properly to exercise those most important functions.

We need some institution clothed with proper powers to discharge those duties. They cannot be performed by any local banking institution operated for profit. Those duties are national in character and the institution to perform them must likewise be of a national character.

Money will under any system flow to a greater or less extent to the money centers where it can be profitably employed. We cannot altogether overcome that economic law, but we can by legislation provide for a safe custodian of those funds and for their proper use in the interest of the public generally. We can say who shall control such an institution, and we can provide that every section of the country shall have a voice in its management. We can make the institution a quasi-public body and not a money-making institution for the profits of its stockholders, and we can give it such powers, and such only, as will enable it to serve the public interest of the entire nation.

These are among the principal objects sought to be accomplished by the creation of the National Reserve Association, recommended by the unanimous report recently made by the National Monetary Commission to the Congress of the United States.

It certainly was an achievement worthy of note and of commendation that the Commission was able to present a unanimous report on the very intricate problems submitted to it. The Commission was both non-partisan and non-sectional in its membership. There were eleven republican and seven democratic members of that body and every section of the country was represented in its membership. It was the product of the thought and work of every member of the Commission, aided by the most eminent authorities of this and other countries. It was indeed fortunate that in completing its work and throughout the entire investigation of the problems submitted to it, there was a total absence of all partisanship. Is it too much therefore to expect that the people of the United States will in the same unbiased and non-partisan manner consider its findings and recommendations? I trust not.

When the Commission examined the banking systems of foreign countries to ascertain what agency they employed, which has enabled them to be free for more than fifty years from money panics, it was found that in each of those countries there was some general institution which, under regulation of law, acted as the custodian of the reserves of the banks, and was usually given the exclusive power of bank-note issue. These institutions of foreign countries, however, do a general banking business. We very soon determined that it would not be wise or desirable to attempt to establish in this country a central bank, such as the Bank of England, the Imperial Bank of Germany, the Bank of France or the First or Second banks of the United States. We do not need such a bank to correct the defects of our existing system. A central bank would be unsuited to our political or economical conditions.

We could not find any model in a foreign country upon which we could base such an institution as we concluded was required for our needs. We therefore decided to recommend the creation of an institution unique in its character, but which should be essentially American in the plan of its organization, in the scope of its powers and in the manner in which those powers should be exercised.

The union of the communities into states, and of the states into the Federal government, seemed to us to furnish an excellent model upon which we could build a general affiliation of the units of our banking system that would be in strict harmony with our political and social conditions. We decided that such an affiliation of the banks of the country properly organized, so as to make absolutely impossible its control by any section of the country, or any group of individuals, however powerful they might be financially or politically, and with only such powers given to it as would enable it to discharge certain national duties in finance that cannot be performed by local banks, would accomplish for the finances of the country what the national government has for its political and governmental interests.

In a general way, the plan provides for a combination of the independent units of our banking system into what is known as "local associations." Those local associations in turn to be formed into district associations and those district associations combined to make up the National Reserve Association of the United States.

The district associations would be 15 in number. The entire country would be divided into 15 districts around 15 of its commercial centers, and in each district there would be a branch of the National Reserve Association. There would be one district and one branch in the New England states; two in the Eastern; four in the Middle Western; four in the Southern, and four in the Far Western and Pacific states.

The only stockholders in the association would be the banks of the country. Each bank coming up to the standard set by the act would be entitled to subscribe only for its pro rata share of its stock, based upon the capital of the subscribing bank.

The stock would be absolutely nontransferable, so that it could not be acquired by any ambitious financial interests. Every possible safeguard which has been suggested or could be thought of to prevent the control of the association for selfish purposes, has been adopted.

The manner of electing the directors of the different associations is somewhat novel; but it secures for those bodies boards of directors chosen by every portion of the country and representing the legitimate business interests of each section. It gives to each bank, small or large, a voice in the selection of

the directors of each of those bodies. It gives to every bank some representation on all those boards, according to the amount of stock each bank holds; but such representation is in every instance a minority representation. It provides that the business interests of the communities to be served shall have their own directors to serve upon the boards and finally the government itself has its own officers upon the national board to insure the management of the National Reserve Association in the interest of the entire nation.

At the time of the formation of the Federal Union, the principal question was, what powers shall be given to the National government, and what retained by the states? So in the formation of the National Reserve Association, I take it the principal question is—what are to be the functions of the National Reserve Association and what powers are to be retained by the independent banking units?

There would be no question here of any implied powers. The Reserve Association would have only such powers as were specifically delegated to it by the law creating it. Those powers can in a general way be classified under four headings.

The Reserve Association would act as the fiscal agent of the National government. All moneys received by it would be deposited with the Reserve Association through its branches, and disbursements made by the government would be through checks drawn on the association. We would no longer have a large amount of money withdrawn from the channels of trade and locked up in the national treasury. The Government would not receive interest upon those deposits, because it is provided that the stockholders of the Reserve Association should never receive a dividend of more than 5 per cent in any one year. All profits over and above that amount after the accumulation of a proper surplus would be paid into the treasury of the United States government for the benefit of all the people. The Government would thereby receive much greater return upon its deposits than it possibly could by way of interest charges.

The Reserve Association would act as the general custodian of the reserves of the banks of the country, and of their surplus funds. Through the deposit of the Government moneys and a large portion of the reserves of the banks, there would thus be accumulated a large amount of lawful money in one common reservoir, which could be used in any section of the country where any unusual demand for it might arise.

The chief function to be performed by the association, and that in which the business men of the country are most vitally interested, is that it would be authorized to rediscount at its several branches, for the banks of the country, the short-time commercial paper held by such banks. It would thus act through its branches as a great national clearing house for the credits of the country. Only commercial paper would be eligible for rediscount at any branch of the Reserve Association. The association and its branches would be strictly prohibited from dealing in or loaning on stocks and bonds of corporations. The association is to be created to serve the legitimate business interests of the entire country and to divorce those interests from the ups and downs of the prices of stocks on the New York Stock Exchange.

The rates of rediscount for commercial paper would be the same at all branches of the association. This would have a tendency to equalize rates in all sections and naturally to lower them in the west and south. It would be of untold benefit to those sections.

In order properly to discharge that great duty and function, it is necessary that the association should have the power of bank-note issue. It is provided that the National Reserve Association should have the power of issuing its notes based upon a lawful money reserve of 50 per cent and the balance to be covered by the short-time commercial paper rediscounted by it through its branches for the individual banks of the country. In course of time, through the voluntary action of the banks, our present bond-secured bank-note currency would be entirely eliminated, and we would have in its place the notes issued by the Reserve Association, based upon a percentage of lawful money and the commercial paper of the country. Such notes would always fluctuate in amount entirely in response to the business needs of the country, and would not be at all dependent, as our present bank-notes are, upon the financial needs of the Government, or the price of its bonds.

I have thus in the briefest possible manner outlined the defects in our banking system, and the plan proposed for their remedy. With such an institution, we would have all the benefits and advantages that could be derived from a central bank, without any of the disadvantages attending the creation of such an institution. We would have a strong affiliation or union of the banks. It would, in fact, be a great National Clearing House, which would serve at all times as an aid to the existing banks, enabling them under all financial conditions properly to serve the business needs of their customers. It would act as the common custodian for a large portion of the reserves of the other banks. Those reserves would become available for effective use in times of strain or stress. The banks would be able to utilize our great banking power and we would not be dependent upon any foreign bank to help us in times of emergency as we have been in the past. Our bank-note issue would be responsive to the business needs of the country. The legitimate business of every section would be divorced both from Government finance and from speculation on Wall street.

The Reserve Association would not do a general banking business. It would not compete in any way with the existing banks. After its creation, the present banks would continue to do business just as at the present time, except that they would always

[Concluded on p. 291.]

*The following paper is a digest of the remarks by the author made at the Peoria meeting of the Illinois Grain Dealers' Association, the object of which was to acquaint the grain trade of Illinois with the purposes of the movement now on for banking law reform. Mr. Bonyngé was formerly a member of Congress from Colorado and a member of the National Monetary Commission.

LATE PATENTS

Issued on October 15, 1912.

Belt Conveyor.—Franklin J. Dearborn, Oakland, Cal. Filed June 8, 1910. Renewed Sept. 9, 1912. No. 1,041,439.

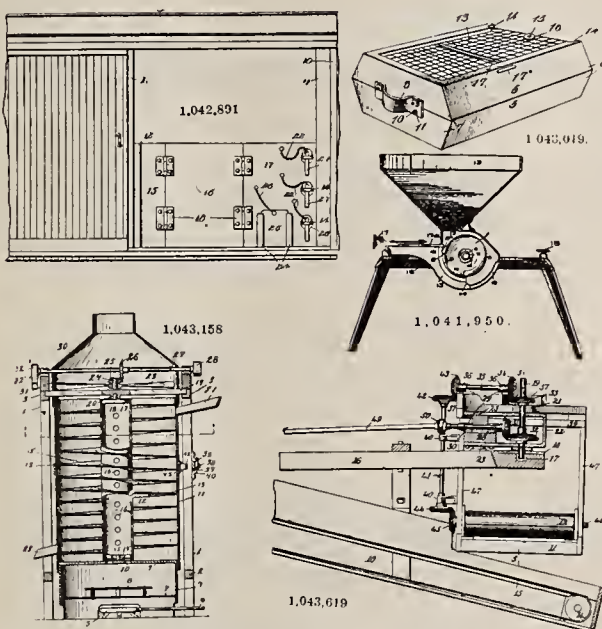
Conveyor.—Bertram Norton, Stowbridge, England. Filed Nov. 4, 1910. No. 1,041,507.

Issued on October 22, 1912.

Mill for Grinding Grains.—John Beall, Decatur, Ill. Filed Sept. 16, 1908. Renewed March 15, 1912. No. 1,041,950. See cut.

Issued on October 29, 1912.

Door for Grain Cars.—Thomas C. Chambers, Mangum, Okla. Filed Dec. 2, 1911. No. 1,042,891. See cut.



Corn Grader.—Daniel F. Luse, Center Hall, Pa. Filed July 22, 1911. No. 1,043,019. See cut.

Issued on November, 5, 1912.

Drier for Grain or Seeds.—Jesse C. Simmons, Shelby, Mich., assignor of one-half to Frederick E. Lewellyn, Shelby, Mich. Filed Feb. 1, 1912. No. 1,043,158. See cut.

Grain Elevator.—Robert Leslie Mapson, La Mesa, and Albert C. Wolfe, Nestor, Cal. Filed May 29, 1909. No. 1,043,619. See cut.

NATIONAL RESERVE ASSOCIATION.

[Concluded from p. 290.]

have some place where they could take the commercial paper received from their solvent business customers and convert those assets into cash.

The organization of the Reserve Association would absolutely prevent banking panics. The experience of the world shows that they are preventable. The proper course to be pursued by banks upon the approach of a financial panic is to extend credit liberally at some figure to all solvent concerns. Our isolated banks are unable to adopt that method. Each bank under our system is compelled by the very law of its existence to look after its own interests only. Consequently, upon the first indication of a financial storm, each of the 25,000 independent banks proceeds to draw in its reserves from its correspondents; to call in its loans, and to refuse additional credit; thereby producing the very result which it is their highest duty to prevent.

With such an organization as I have outlined, every bank in the country would feel perfectly safe, no matter what the general financial conditions might be, in extending to a solvent customer such help as he might require at such rates as the conditions make it necessary to charge; because the individual bank would know that in case of an emergency it could take the paper of its solvent patron to the branch of the Reserve Association in its own locality, and there rediscount it, receiving in exchange either lawful money or notes of the Reserve Association redeemable at all times in lawful money.

It will take the united effort of all the thoughtful people of the country to bring about this much needed reform. It is to be hoped that all patriotic citizens will give the National Citizens' League, which has been organized for the promotion of a sound banking system, their generous support in the great work which it has undertaken to perform. It is thus, and thus only, that the work so auspiciously begun shall finally result in legislation that will give to this country a modern and scientific banking system, adequate to carry the ever expanding business of this the richest and most progressive nation of the world.

The British SS. *Volumina*, from Baltimore to Rotterdam, Oct. 27, had on board 550,000 bushels of oats, the largest grain cargo to ever leave that port. The cargo was estimated to be worth \$217,250. Louis Muller & Co. were the shippers.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

SECOND-HAND GRAIN BAGS.

For sale, 5,000 second-hand grain bags; any quantity. For prices write FOELL & CO., 123 Market street, St. Louis, Mo.

ELEVATORS AND MILLS

FOR SALE.

Southern Minnesota, 12,000-bushel elevator, on Illinois Central Railroad. Feed mill, flour and feed side line; good territory; fine prospects; price reasonable. BOX 59, London, Minn.

FINE TERMINAL PLANT FOR SALE.

Grain Elevator property for sale at Harvey, Ill., on Grand Trunk Railroad. Description: 10 fire-proof storage tanks, capacity 250,000 bushels; bleaching tower; boiler house and boiler; office; motors; machinery; electric switches; concrete foundation for working house, etc. Direct and belt connections with all railroads. Address H. W. ROGERS & BRO., Western Union Bldg., Chicago, Ill.

MACHINERY

FOR SALE.

One 25-horsepower, Otto Gasoline Engine, in good running order. Price, with battery ignition, \$350; magneto ignition, \$375. THOMPSON & SONS MFG. CO., Beloit, Wis.

FOR SALE.

Gas or gasoline engines: 15 horsepower, \$200; 30-horsepower Fairbanks-Morse, \$600; all good condition. Also various brick machinery. Address FORT SCOTT BRICK CO., Fort Scott, Kan.

FIRST-CLASS SECOND-HAND.

One No. 1 Star Traction Drilling Machine.
One No. 1 Special Star Traction Drilling Machine.
One Eli Power Baling Press.
One 10-horsepower Foos Gasoline Engine, mounted.
One 1,400-foot 2-inch hawser cable, only used to finish one well. C. FRIEDLY, Dunkirk, Ohio.

HELP WANTED

WANTED AT ONCE.

All-around miller for country mill of 65 barrels' capacity, run by electricity, must be up to date in milling and of temperate habits. Married man preferred. State references and wages wanted. PRAIRIE MILLING CO., Montgomery City, Mo.

99

For twenty-five years 99 Board of Trade has led as headquarters for latest grain news and descriptive literature covering world's crops. Wagner Letter, Wagner Crop Booklet, "Grain Investments" sent on request. Write to 99.

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Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

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Special Attention

Phone
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Orders in Futures
carefully executed

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED.

An attrition mill for grinding corn meal. JOHN F. HUNT, East Lynn, Mass.

Grain and Seeds

OATS STRAW WANTED.

Wanted, 100 cars oats straw. C. T. HAMILTON, New Castle, Pa.

WANTED FIELD SEEDS.

All varieties. Quote with samples. J. OLIVER JOHNSON, Chicago, Ill.

FOR SALE.

Alfalfa seeds, highest grades; also red clover and timothy seeds. Write us. C. A. SMURTHWAITE GRAIN & MILLING COMPANY, Salt Lake City, Utah.

FLOUR AND MILL FEEDS.

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

CHOLERA PROOF HOGS.

I have more than 5,700 swine on my farm and am selling grade Yorkshire, Tamworth, Poland-China and Duroc brood sows, boars and shoats in any quantity at best Buffalo market price for fat Yorkers on day of sale. Sows to farrow soon included. These hogs are not fat, are cholera proof and prolific breeders. Pigs that are six to ten weeks old at \$3 to \$4. ALVAH BROWN'S PIG FARM, Grand Rapids, Mich.

WANTED Mixed Alsike and Timothy

Carlots or less. Will pay you more than you can get elsewhere. Send samples today. Also want Timothy, Red Clover and Alsike, etc.

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DECORAH, IOWA

SEEDS WANTED

We solicit correspondence from shippers or dealers who are in position to offer us, or can secure for us, Timothy, Red, Alsike or Alfalfa Clover, Millet, Red Top, or other Field Seeds. Write us, with crop news, samples, and other information as to production of seed and approximate values in your section. Please refer to this advertisement.

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BOURBON, INDIANA

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BALTIMORE, MD.

Louis Muller Co.
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Our Specialty

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PEORIA, ILL.
References { First National Bank, Peoria, Ill.
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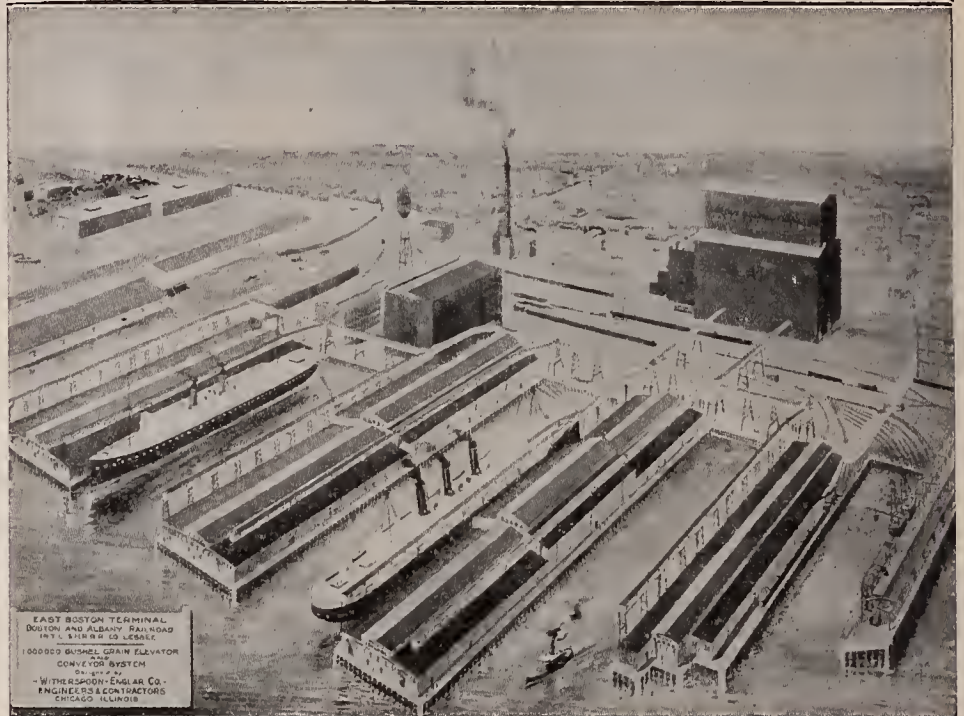
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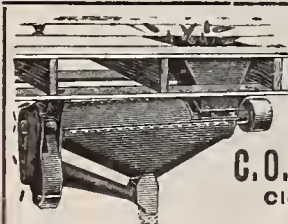
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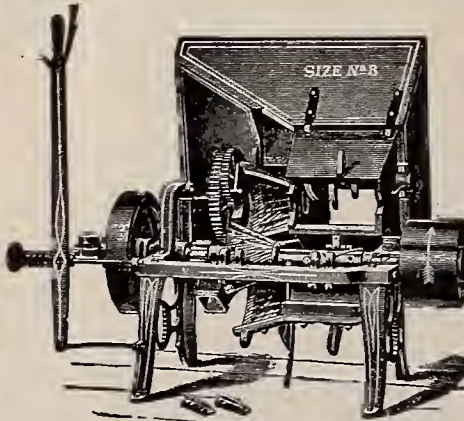
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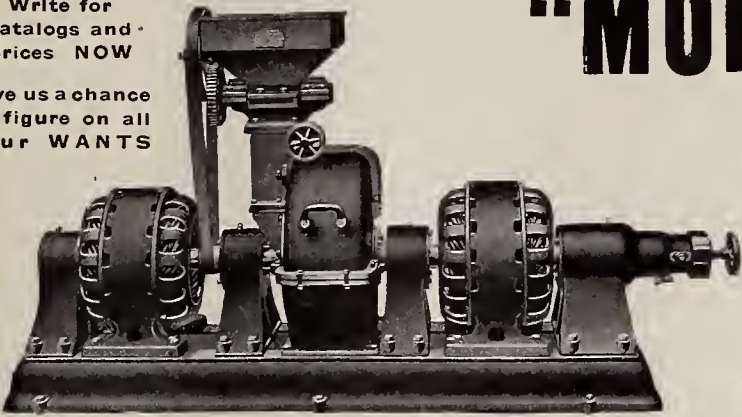
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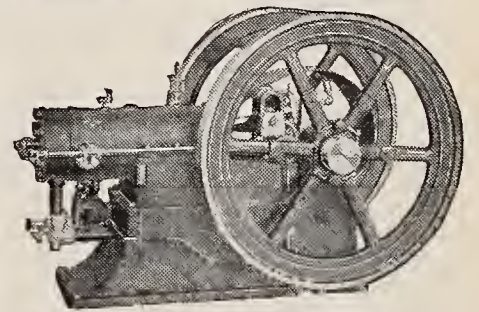
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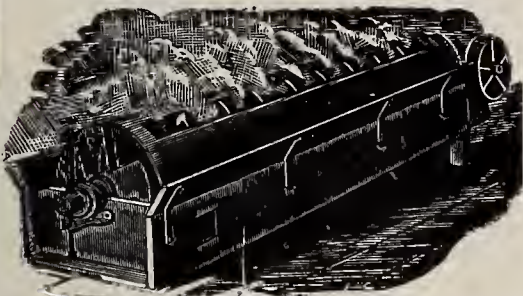
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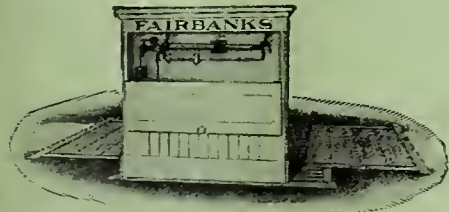
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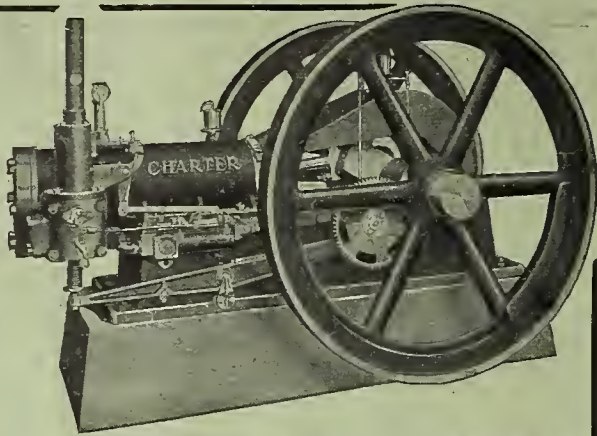
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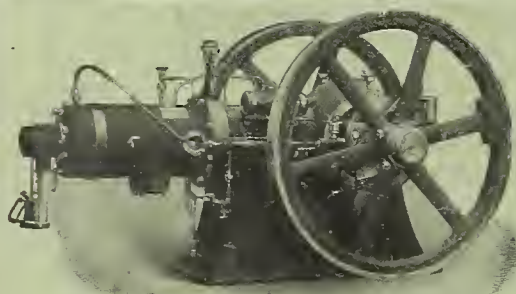
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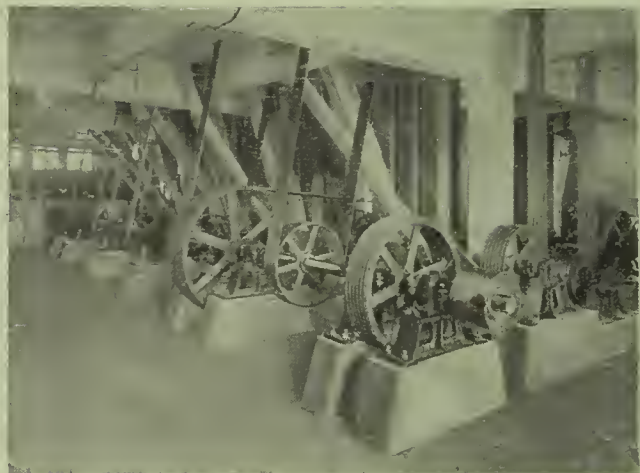
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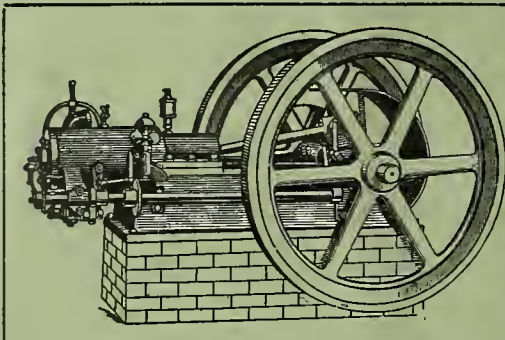
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